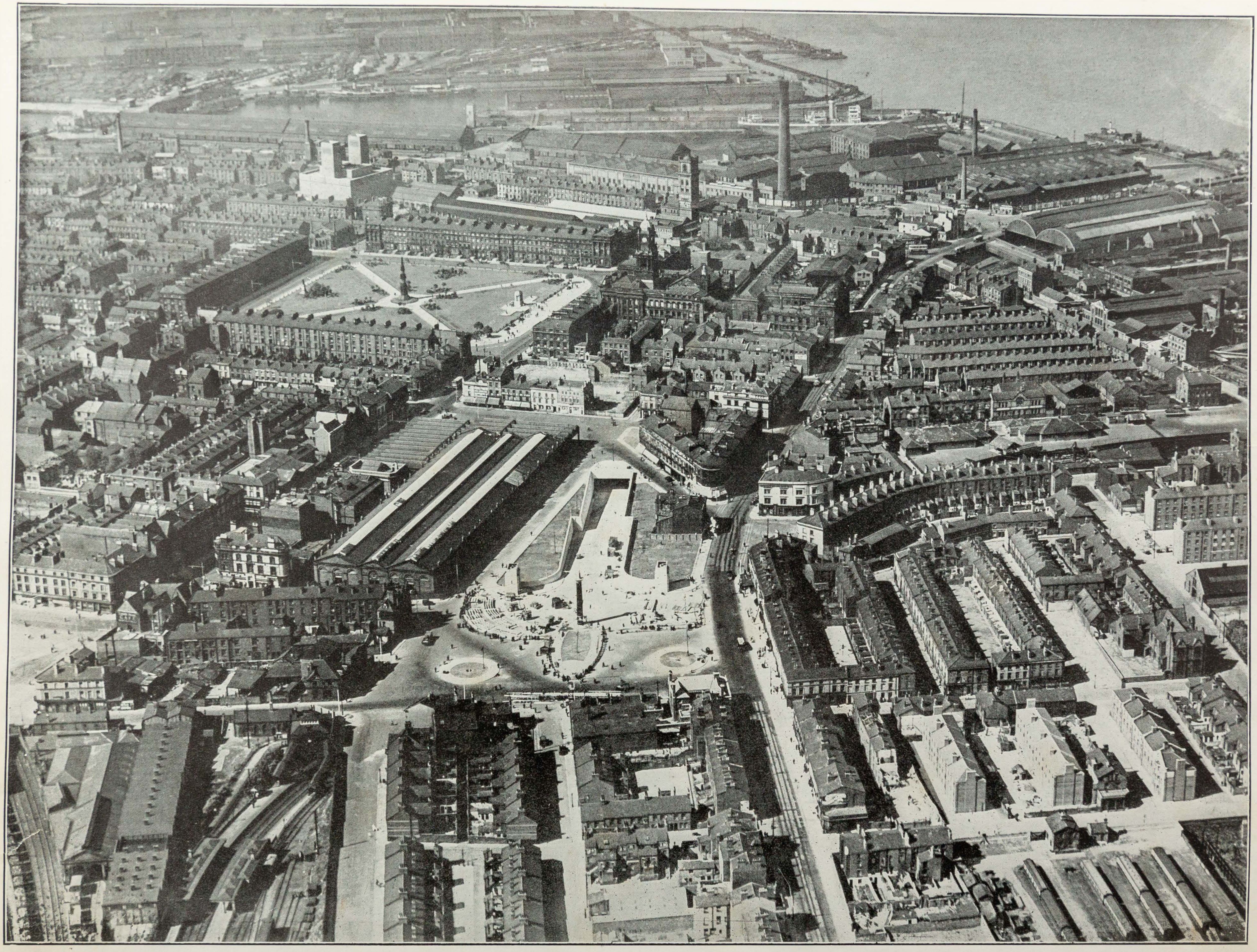
OUTLINE PLAN

for the

COUNTY BOROUGH OF BIRKENHEAD



OUTLINE PLAN

for the

COUNTY BOROUGH OF BIRKENHEAD

Prepared for the Council by

PROFESSOR SIR CHARLES REILLY
O.B.E., M.A., Hon.Ll.D., F.R.I.B.A., Hon.M.T.P.I., Royal Gold Medallist in Architecture, 1943

and

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◆

With a Foreword by

ALDERMAN J. H. HODGKINSON
Chairman of the Planning Committee

COUNTY BOROUGH OF BIRKENHEAD, 1947

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THE BASIC SURVEY

Note : In order to make suggestions for the improvement and development of the town it was necessary, as this had not been done, to make first a basic survey of it, showing it in its most important sociological and economic aspects. The results of this survey are plotted on Plates 1 to 37. With this survey before us it has been possible to make our suggestions with some degree of confidence as to their usefulness. Without being based on such a survey town-planning projects are bound to be superficial and unreal. Birkenhead has had before it an example of such town planning for 100 years in the long wide streets between the Park and the Docks, which have never received the buildings for which they were designed.

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FOREWORD

by

ALDERMAN J. H. HODGKINSON

(*Chairman of the Planning Committee of the County Borough of Birkenhead*)

As Chairman of the Planning Committee of the County Borough of Birkenhead, it gives me great pleasure, on behalf of the Committee, to be able to present the Outline Plan for the Borough. This Plan has been produced by Professor Sir Charles Reilly, one of the foremost authorities on Town Planning in England to-day and is the result of two years' constant work by him and Mr. N. J. Aslan who assisted him in its preparation.

Birkenhead suffered considerably as a result of damage received by enemy action during the War years, and the Plan unfolded in the following pages aims at repairing the scars left by the enemy, and to plan the town in its entirety for the future, including the improvement of the approaches to the town, the re-planning of the town centre, the development of the outlying districts, and the preservation of those parts, historic and beautiful.

This, then is the Plan. It is put forward as a guide for the future development of the town of which we are so proud. Readers must not assume that the whole of the recommendations of Professor Sir Charles Reilly have been or will be adopted. The Planning Committee are steadily working through the pages of the Plan and adopting or amending the recommendations contained therein. Some of these recommendations are both far-reaching and expensive, but, if they are of definite advantage to the town, they will be adopted. For example the proposal for the linking of Argyle Street and Price Street by a Sub-Surface Roadway has already been adopted.

With the coming into operation of the new Town and Country Planning Act all Planning Schemes will be capable of revision every five years so that it will be possible to add to or alter any of the recommendations contained in this Plan which are included in the Town Planning Scheme for the Borough.

I hope the citizens of Birkenhead will read and discuss the Plan amongst themselves ; they bore the brunt of enemy action during the war, and I hope that by reading the following pages, they will understand and appreciate what is to be the future of the town they helped to save.

Few of us will see the completion of the Plan in its entirety, but we are pointing out the destiny of future citizens of Birkenhead, and it is an honour to do so, and furthermore, it is an honour of which we are justly proud.

May, 1947.

Planning Committee

Alderman J. H. Hodgkinson (Chairman)
Alderman L. Griffith Davies (Deputy Chairman)
Alderman A. Boyd

Councillors T. E. Anderson, H. Griffith, Mrs. S. A. Haygarth, J. Kennedy, R. N. Melville, W. T. Owen, A. D. Pappworth, H. Platt, J.P., W. E. Power

E. W. Tame, O.B.E., Town Clerk
B. Robinson, M.I.Mun.E., F.R.San.I., Borough Engineer and Surveyor

Authors' Note

AND ACKNOWLEDGMENTS

THE AUTHORS OF THIS Report came to Birkenhead with a certain amount of general knowledge of the town and· the surrounding country, as they both had for longer or shorter periods lived on Merseyside. Indeed, one of the authors was reminded on his arrival that he had expressed a wish at the Town Hall some twenty years earlier, in giving prizes away to a Girls' Secondary School, to rebuild the town. This probably meant that the town as it existed then, and still further as it exists today, did not seem worthy, in spite of its magnificent beginnings, and even because of them, of the grand position it occupies between a great estuary and a glorious countryside.

Although its docks lie at right angles to the river, the town, except for the fine gantries of its shipbuilding yards and the ventilating towers of the Mersey Tunnel, does not offer an imposing front to the river, nor, what is more important, can the townspeople enjoy that magnificent frontage. It will be seen that the accompanying Plan, not only increases the area to be devoted to industry, but also tries to remedy some of these mistakes. Further, it attempts by a bold diversion of traffic to differentiate the industrial traffic from the rest, and to take it to the docks and industrial areas by a more direct route.

Of the remaining problems, perhaps the greatest of all is housing, not so much as this is concerned with an increase in the total number of houses, though that is included, but in a wiser distribution of them, with, it is hoped, better possibilities both for health and appearance. Apart from its fine beginnings in Hamilton Square, Birkenhead has nowhere in its residences for rich, middle class, or poor, lived up to that quality. St. Aidan's Terrace is the nearest approach. It is hoped, therefore, that in the rebuilding of the large part of the town (a task which must in any case be undertaken within the next forty years) the work will be under the control of the Town's Architect, and be more worthy of Birkenhead, both as regards design and materials, than that carried out during the past half century. The final hope for the town's appearance must lie mainly in two directions ; in a return to the clearer physical atmosphere of the past and, under the guidance of trained architectural taste, in straightforward contemporary modern architecture, of which at present Birkenhead has few examples.

The authors hope that the considerations they have put forward in the Report which follows will be judged, as all town planning projects should be, in terms of human use, convenience and happiness.

They take this opportunity to acknowledge and thank all those who have helped them in the preparation of the Plan, particularly Mr. E. W. Tame, the Town Clerk, and Mr. B. Robinson, the Borough Engineer and Surveyor.

They would further like to mention and thank Mr. J. E. Rhodes, the Deputy Borough Engineer and Surveyor, whose knowledge of the town has been particularly valuable, and Mr. T. B. Tinnion and his associates of the Building Inspector's department. The Medical Officer of Health, the Director of Education, the Chief Constable and the Transport Manager, the officers of the Electricity, Gas, Water and Ferries departments, the Librarian, and the Baths Superintendent and Engineer also gave valuable services for which they are grateful.

Their thanks are also due to the Regional Planning Officer and to the Research Officer, Mr. F. J. McCulloch, of the Ministry of Town and Country Planning for the useful fact and figures which he supplied, and to the Divisional Road Engineer of the Ministry of War Transport and his department. Messrs. Peter Shepheard, Eric G. Broughton, and Neville Ward are thanked too for their fine perspective work and sketches.

Their thanks and gratitude are due to their staff, whose devotion alone has made possible the preparation of a scheme in the short time available, far less than that given to the plan for any other similarly sized town. These are especially due to Mr. F. Mitchell, Mr. G. W. Dolbey, and Miss J. Morton Evans for full time work, and to F. S. Bolland Miss Reynolds and Miss Barrows, Mr. C. Z. Chen, Mr. K. Bartlett and Mr. L. Gogarty for temporary help.

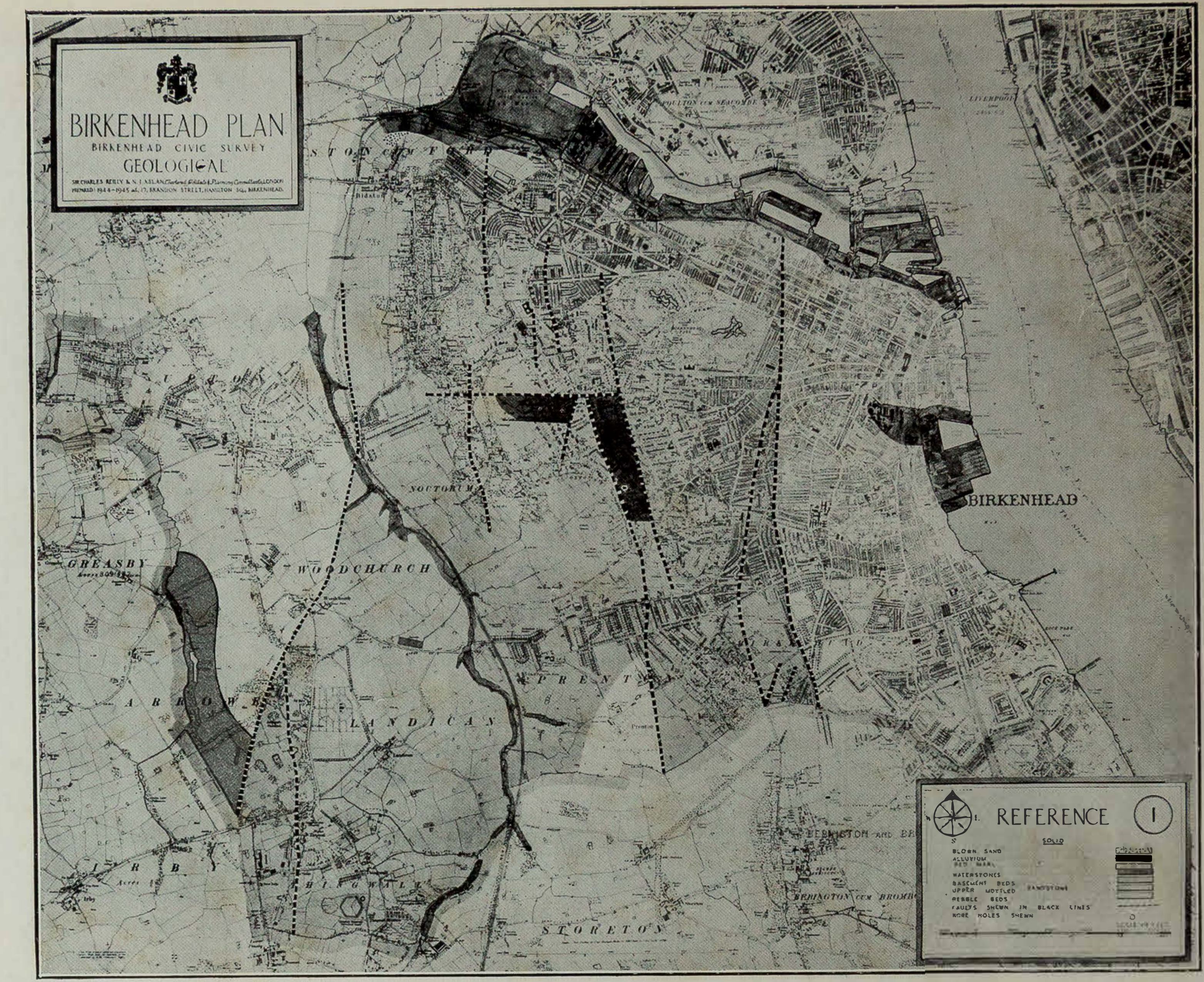
They would also like to mention with thanks the services of Miss J. Thomas, who drove them about the Borough, and of Miss G. Halpen and Mrs. L. Robinson, who typed their work throughout.

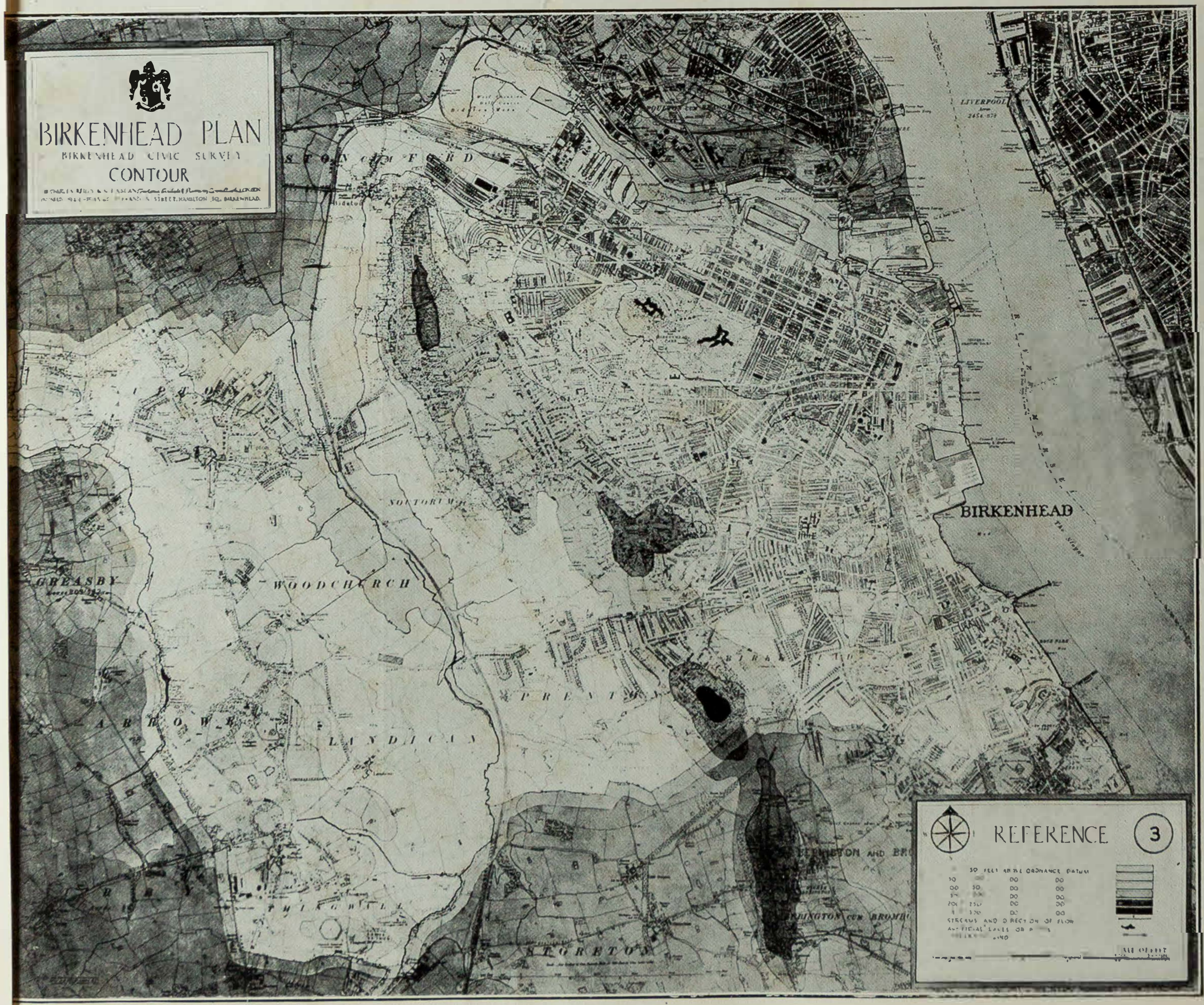
Special thanks should be given to Mr. J. E. Allison of Birkenhead Institute, Chairman of the Liverpool Geographical Association, for his invaluable help in the historical and demographic sections of the Report, some of which are almost in his own words, and also to Mr. W. M. Campbell, Curator of Kew Gardens, for his report on the planting and spacing of trees suitable to an area which he well knows. They are grateful to Mr. A. de M. Chesterman of the Ministry of Agriculture and Fisheries for his statement about the case for agriculture in the Birkenhead Plan.

Charles Reilly
N. J. Aslan

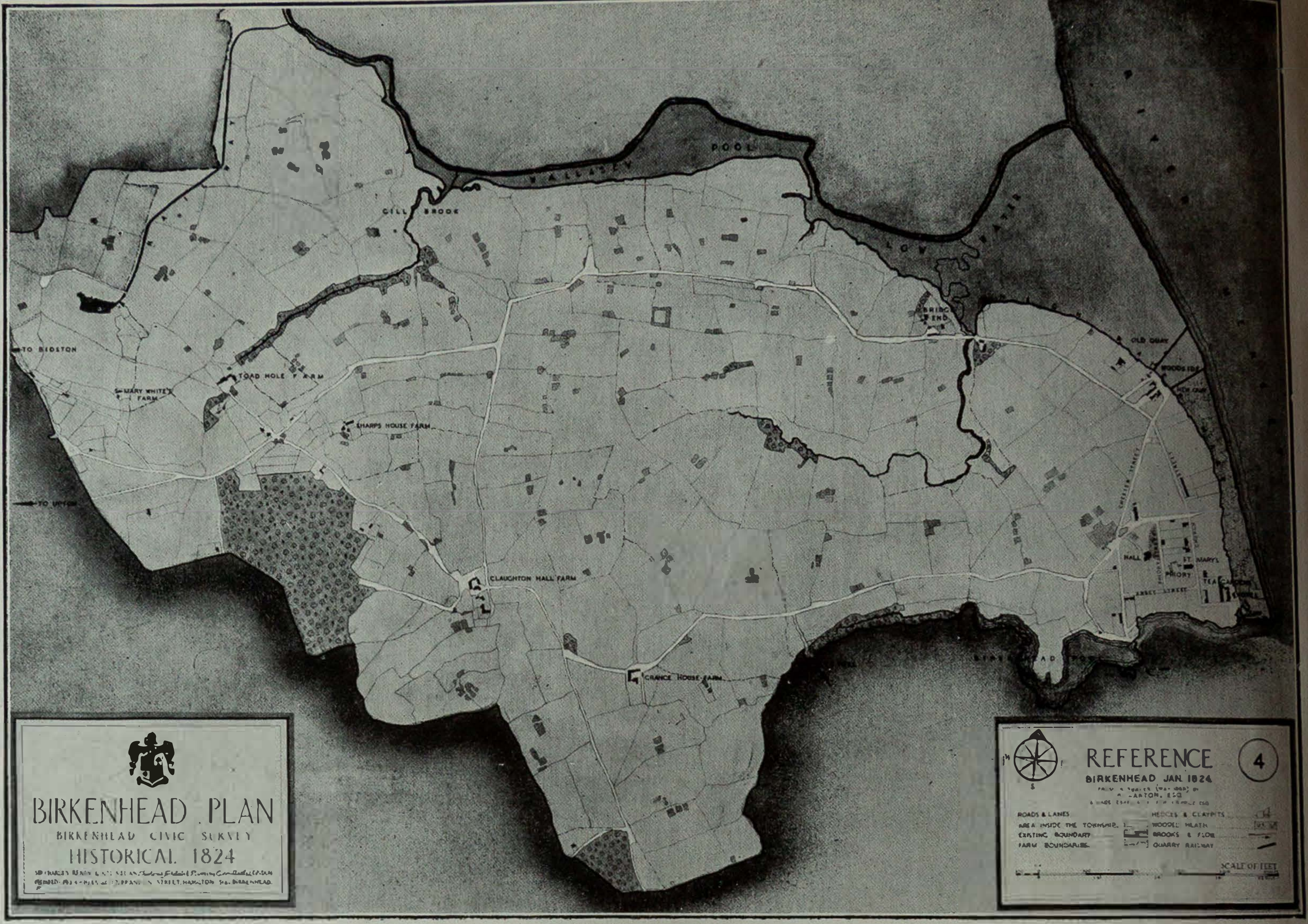
SANDSTONE UNDERLIES BIRKENHEAD. The town occupies the eastern half of the scarpland country of north-central Wirral where the basic variety of relief has been determined by a series of faults which give rise to a number of picturesque step-like ridges.

About 70 per cent. of this sandstone has been covered with clay of glacial origin.



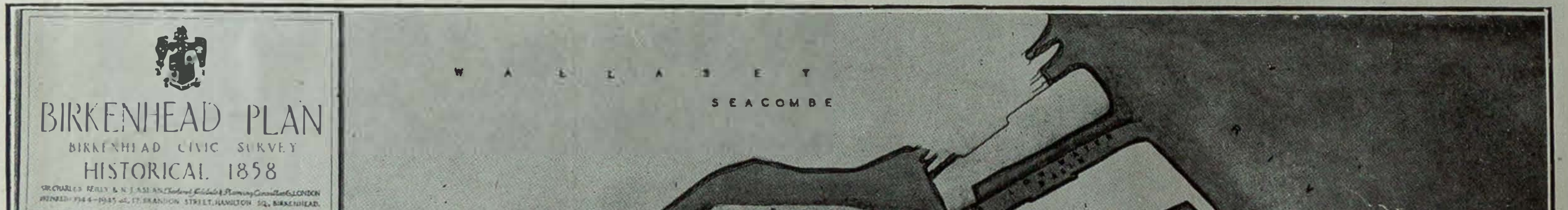


THE BIDSTON-PRENTON RIDGE, which rises to about 250 feet, tends to divide Birkenhead into two contrasting halves, and older and more closely built-up area to the east and an area to the west which is partly suburban and partly rural.



BIRKENHEAD, THE ISOLATED FARMING COMMUNITY, 1824. Birkenhead and Claughton were thinly peopled even for farming townships, but their isolation was at last being broken down.

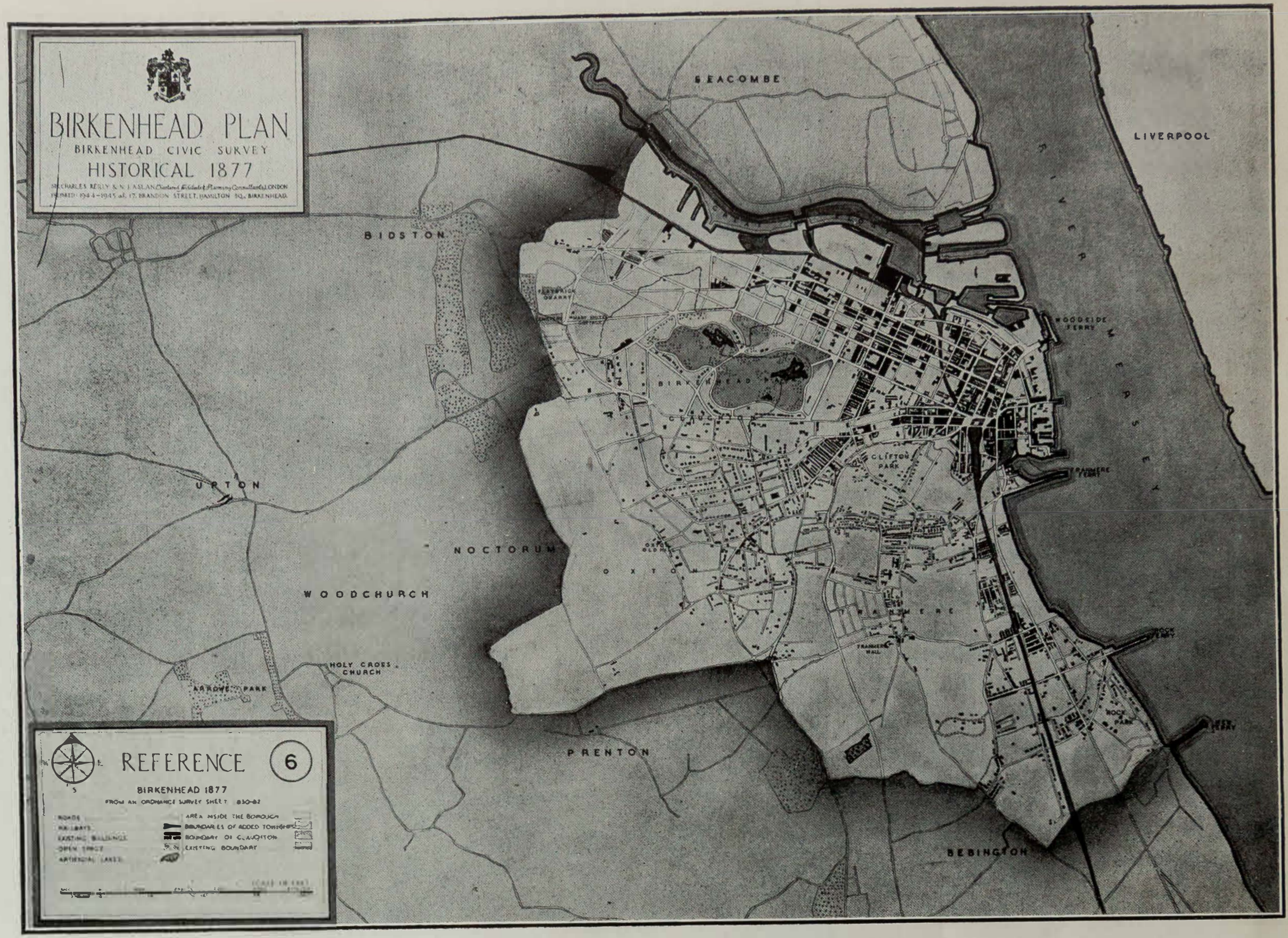
The first steam ferry crossing to Woodside (a very uncomfortable one) had recently been made, and the parish church of St. Mary recently consecrated. The tea gardens and hotel testified to the new-found attractiveness of the Woodside front.

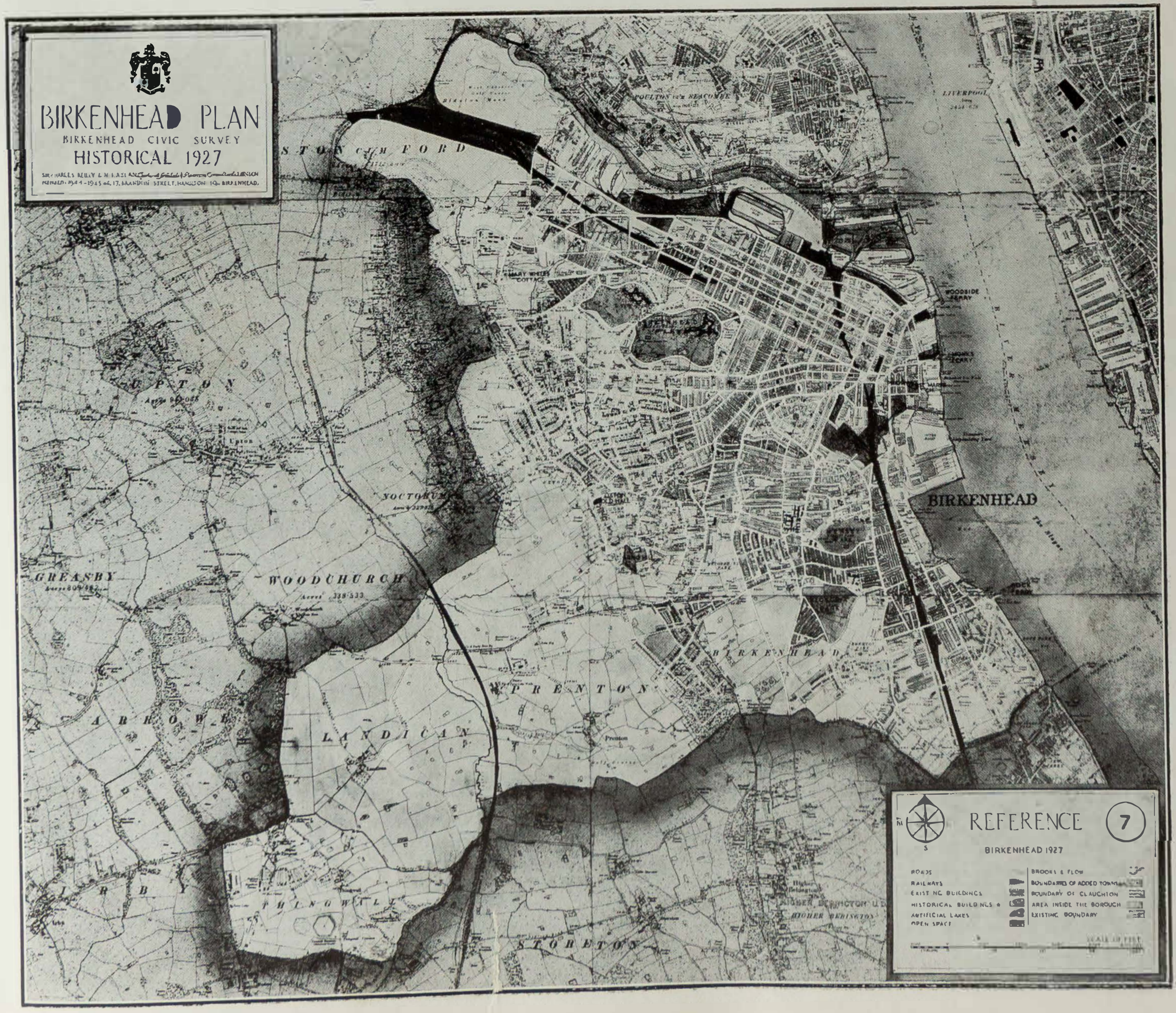


BIRKENHEAD, THE YOUNG TOWN, 1858. As a result of improvements in transport, a new town had been created whose main functions were those of dormitory, manufacturing site and seaport. Noteworthy features were (*a*) the grandiose street plan, (*b*) the large park, a really fine achievement for the period, (*c*) the shipyard, which denied the old access to the river front, (*d*) the railway cutting across the rectangular grid and creating awkward triangular spaces.

BIRKENHEAD, THE NEWLY CREATED BOROUGH, 1877. Tranmere and Oxton had recently been incorporated and the town's boundaries extended. Transport had been improved by (*a*) the extension of existing dockside railways, (*b*) the construction of the floating stage at Woodside, and the introduction of the saloon steamer, (*c*) the introduction of the horse-tram.

On Tranmere ridge the Union Workhouse had been erected and the picturesque Old Hall (built about 1590) demolished.



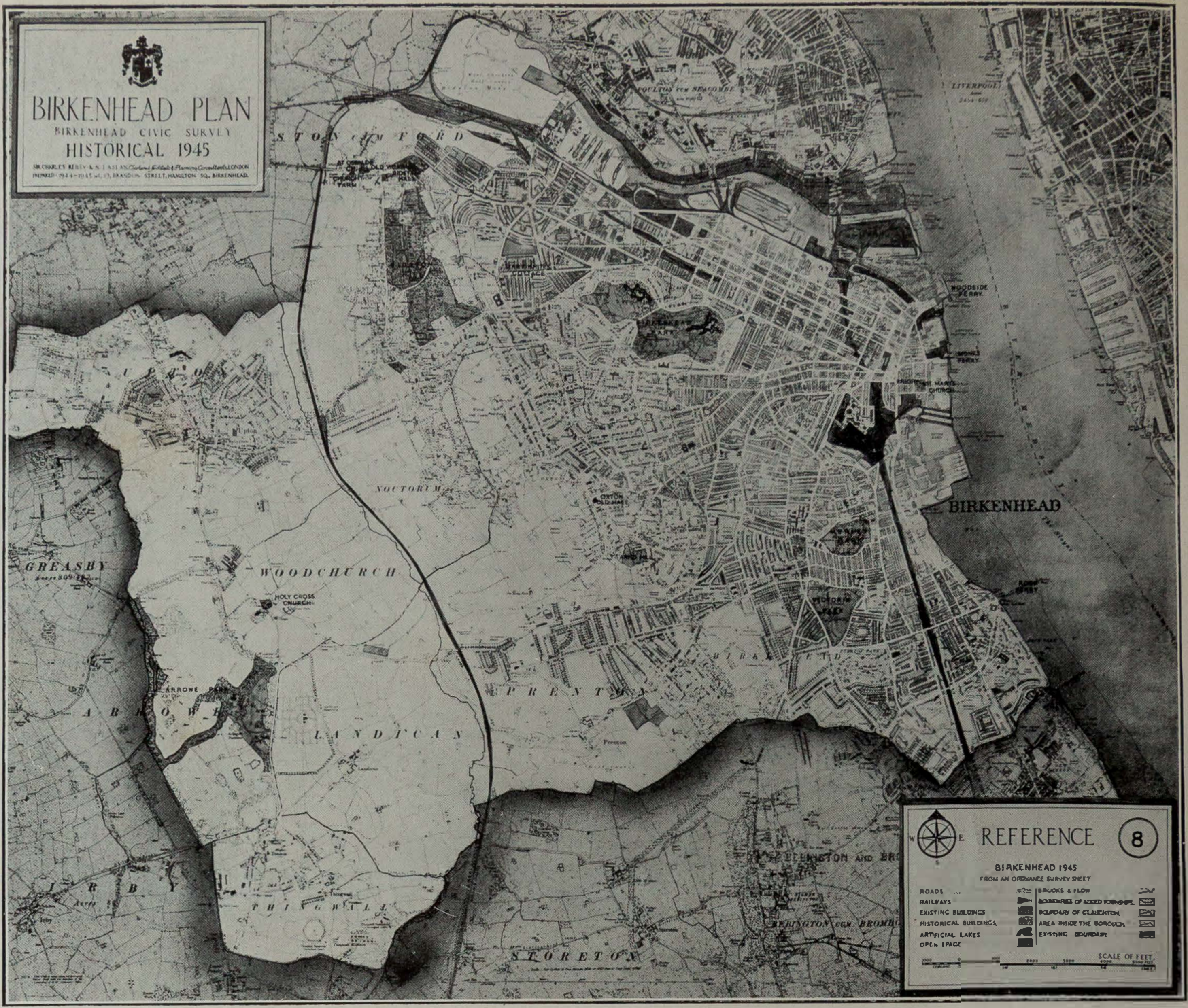


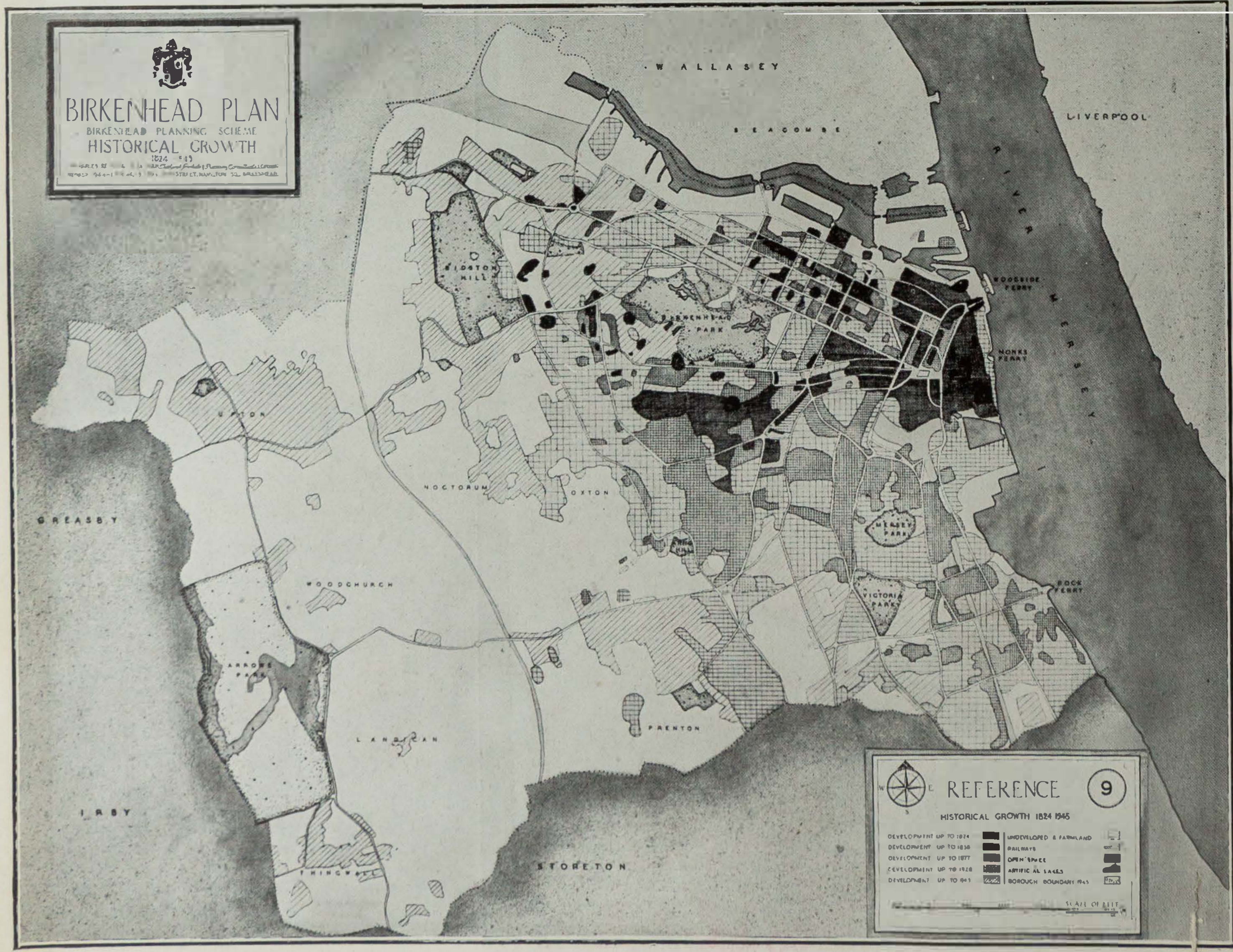
BIRKENHEAD BETWEEN THE TWO WARS, 1927. The motor bus and the electric train had succeeded the horse tram; the river had been tunnelled and the Mersey Railway electrified. Cammell Laird's had extended southwards, dockside industries had developed and new open spaces had been created.

Population had increased to 150,000 and had spread beyond the Bidston-Prenton ridge into the Fender Valley where several rural townships had been incorporated.

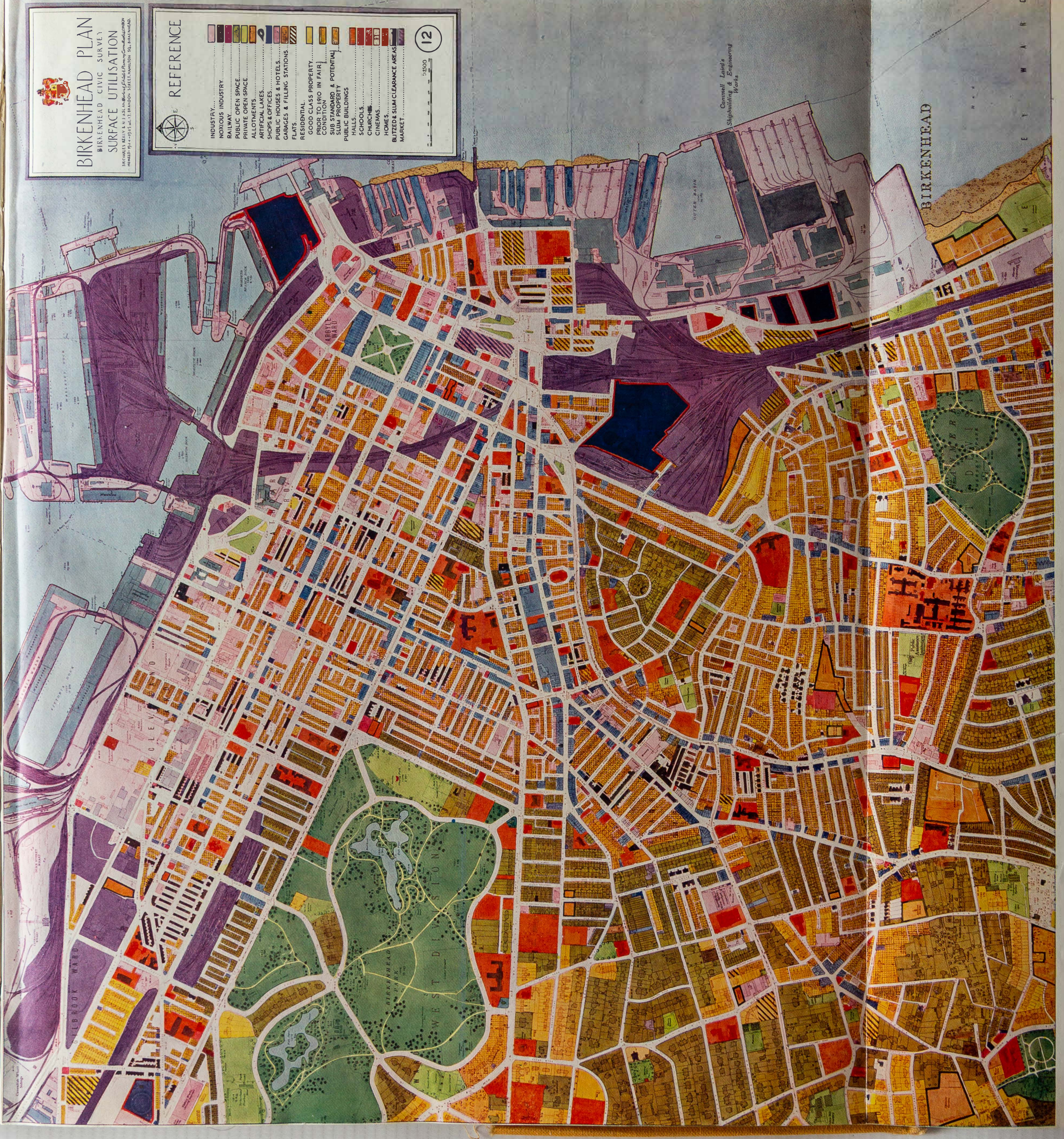
BIRKENHEAD ON VJ DAY 1945. Building development beyond the Bidston-Prenton ridge had been maintained and the western boundary of the Borough still further extended. Communications had continued to improve with the general adoption of the motor bus and the opening of Queensway Tunnel and Bidston Dock.

Population had declined, but despite this, enemy action and war-time cessation of normal building activity had created a serious housing shortage.





IN GENERAL, the town has grown outwards from the Woodside nucleus and from the dockside. As a result the lower town is congested and in need of re-development.


BIRKENHEAD PLAN

BIRKENHEAD CIVIC SURVEY

SURFACE UTILISATION

SIR CHARLES REILLY & N J ASLAN. [illegible] LONDON
PREPARED: 1944–1945 at 17, BRANDON STREET, HAMILTON SQ., BIRKENHEAD.

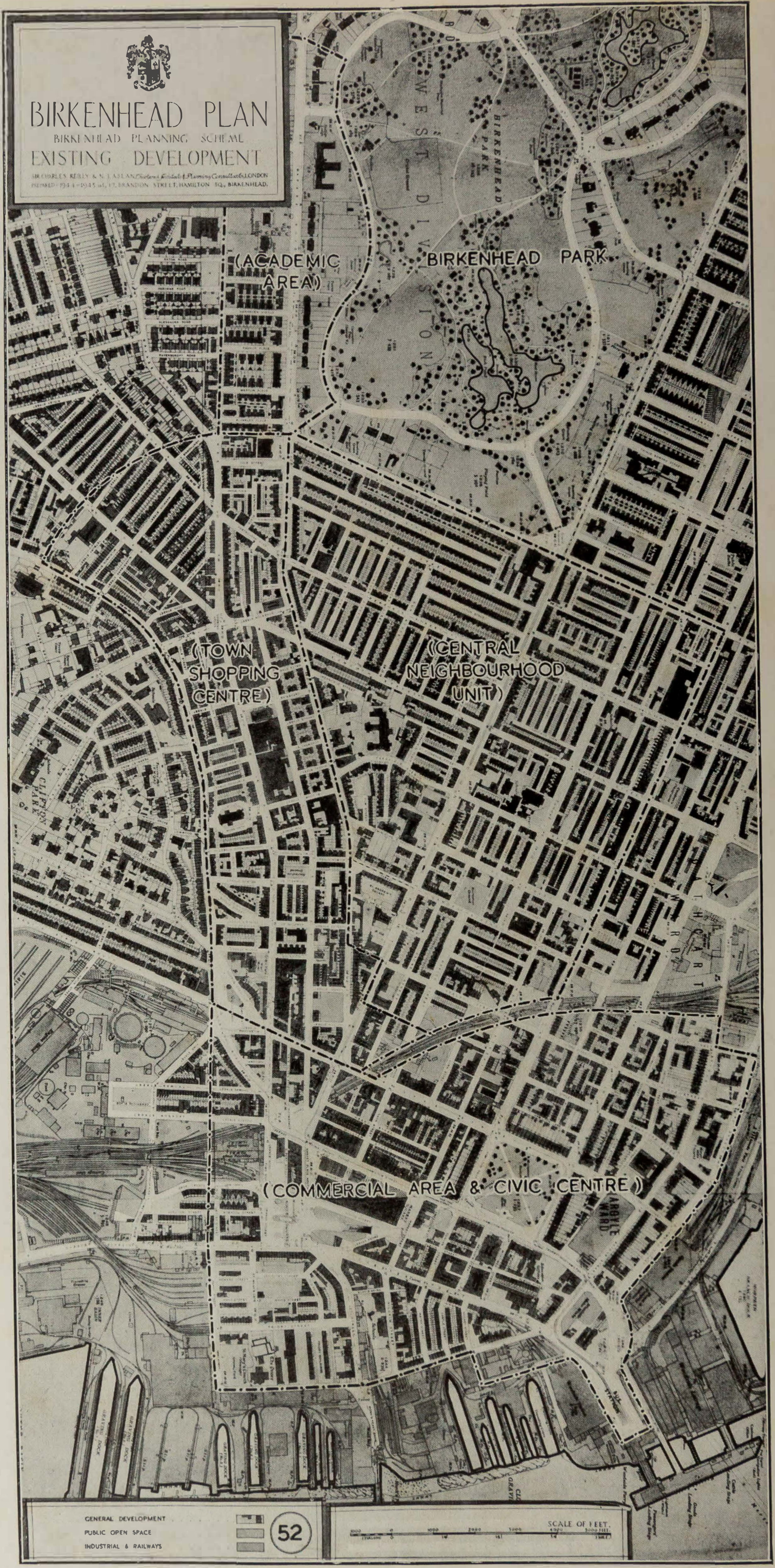
REFERENCE

- INDUSTRY
- NOXIOUS INDUSTRY
- RAILWAY
- PUBLIC OPEN SPACE
- PRIVATE OPEN SPACE
- ALLOTMENTS
- ARTIFICIAL LAKES
- SHOPS & OFFICES
- PUBLIC HOUSES & HOTELS
- GARAGES & FILLING STATIONS
- FLATS
- RESIDENTIAL
  - GOOD CLASS PROPERTY
  - PRIOR TO 1910 IN FAIR CONDITION
  - SUB STANDARD & POTENTIAL SLUM PROPERTY
- PUBLIC BUILDINGS
  - HALLS
  - SCHOOLS
  - CHURCHES
  - CINEMAS
  - HOMES
- BLITZED & SLUM CLEARANCE AREAS
- MARKET

1:2500

⑫

THE LEGACY OF MUDDLED GROWTH which it is the planners' task to reduce to order, is brought out by this map and by Map 12 overleaf. A specially important aspect of this task is the segregation of housing from industry and other inappropriate users.


BIRKENHEAD PLAN
BIRKENHEAD PLANNING SCHEME
EXISTING DEVELOPMENT
SIR CHARLES REILLY & N. J. ASLAN Chartered Architects & Planning Consultants, LONDON
PREPARED 1944–1945 at 17, BRANDON STREET, HAMILTON SQ., BIRKENHEAD.
(ACADEMIC AREA)
BIRKENHEAD PARK
(TOWN SHOPPING CENTRE)
(CENTRAL NEIGHBOURHOOD UNIT)
(COMMERCIAL AREA & CIVIC CENTRE)
GENERAL DEVELOPMENT
PUBLIC OPEN SPACE
INDUSTRIAL & RAILWAYS
52
SCALE OF FEET.

Section One

THE GROWTH OF THE TOWN AND ITS PRESENT STATE

Early History

IN ORDER TO PLAN the future development of any town it is necessary to try and determine both the varied purposes it serves and can serve, and its innate character. These are mainly matters of evolution based on the permanent factors of geography and climate. A slight historical sketch, therefore, of Birkenhead's growth and the reasons for it during its comparatively short existence as an important town seems to be called for at the outset. Its growth is illustrated by Maps 4, 5, 6, 7, 8 and 9.

Map No. 4 shows Birkenhead-Claughton as it was in 1824. It is a bare stretch of country with a hamlet or group of farm buildings here and there. Prominent among them are Claughton Hall and Grange House Farm. Birkenhead township, in the legal sense of the term, comprised the peninsula of Woodside, pushing out into the Mersey between the Wallasey Pool to the north and the Tranmere Pool to the south, together with a wide margin of land fronting Wallasey Pool. The Hall, the residence of the Lord of the Manor, was located between the present Priory Street and Chester Street. It was this building, or a previous one on the same site, which was taken in the Civil War during the operations against Liverpool. From the Mersey, Woodside presented an attractive prospect of a rocky foreshore backed by low sandstone cliffs and green wooded slopes, with the Bidston-Storeton range of hills to be seen over them on clear days in the background. At the south-eastern corner stood the picturesque ruins of the Benedictine Priory, founded about 1150 and dissolved in 1536. Behind Birkenhead, towards the heath country on the west, lay Claughton. The two townships included a good deal of infertile, low-lying land, and no proper village developed in either.

At the first census in 1801 the inhabitants of the four townships were as follows: Birkenhead 110, Claughton 67, Oxton 137 and Tranmere 353. Much of Oxton was desolate heath. The village consisted of mean, straggling cottages along the site of Talbot Road. As late as 1819 it was said of Oxton that no degree of civilization had reached it. Tranmere was the most populous Wirral township after Great Neston.

Birkenhead and Claughton were at this time in the possession of Francis Richard Price and Oxton of the Earl of Shrewsbury. In Tranmere, on the other hand, were many landowners, a fact which affected the development.

Before 1817 passengers wishing to cross the river could do so by using either the Woodside Ferry, the Tranmere Ferry (south of Tranmere Pool) or the ferry from Rock House (Rock Ferry). At Woodside the landing slip, on the site of the present lairage, was a primitive affair, and passengers often had to wade ashore or be carried on the backs of boatmen. In 1817 there began, however, a new era in cross-river transport, the *Etna*—the first steamship to be so used—making half-hourly sailings from Queen's Dock, Liverpool, to Tranmere Ferry. In 1820 the *Etna* was making a new crossing called the Birkenhead Ferry to a point near the Priory corner of the Birkenhead peninsula. This ferry, which was equipped with a slip and a small dock, was designed to serve the newly built and fashionable Birkenhead Hotel with its well laid-out grounds. In 1822 began a steamer service from the old Woodside Ferry slip, the new lessee of this ferry, one Hugh Williams, undertaking to run a boat punctually every hour if enough passengers offered. Mr. Williams soon after constructed a new and more commodious slipway 30 feet in width, the site of which is now covered by the present ferry approach.

Industrial Development

Industrial and residential development are foreshadowed. Part of Bridge End Farm (see map No. 4, page 2) abutting on Wallasey Port had by 1824 been sold to a Mr. Laird, a Greenock shipbuilder, who contemplated the construction of a canal to Deeside. The land on either side of Grange Lane had been sold for house building, while a number of residences had already been erected close to the river front between Church Street and Priory Street. The population, which by 1811 had only increased to 193, in 1821 was 310. The Parish Church of St. Mary, in the precinct of the Priory, was opened, however, for public worship in 1822, showing from its size the strong expectation there was of new residents, an expectation clearly based on the proximity to Liverpool and the cross-river service, a continuing and most important factor in the life of the town up to the present time.

The beginning of the shipbuilding industry, the first to give Birkenhead a life independent of Liverpool, was the establishment of Laird's yard in Vittoria Street in 1825. Laird's were the virtual creators of iron shipbuilding, and by 1840 had constructed 32 iron ships, every one in a sense a pioneer. By 1831 the population had increased to 2,790. In 1833 an Act was passed for the paving, lighting, watching, cleansing and improving of Birkenhead and for the establishment of a market within the township. Government was to be in the hands of elected representatives, known as Commissioners, half of whom had interests in Liverpool.

In 1826, while the town had less than 3,000 inhabitants, a comprehensive plan of wide, straight streets, some a mile and a half long, was laid out on a scale worthy of a town of 300,000 rather than 3,000, and the noble Hamilton Square with its fine residences was designed and built by Gillespie Graham, an Edinburgh architect. If all this showed immense optimism as regards the future of the town and can be admired from that point of view, it was, except for Hamilton Square and a few adjacent buildings, little less than a disaster. Never has Birkenhead been able to live up to such paper grandeur, nor indeed could any other provincial city have done so saddled with such a plan. Instead of buildings on the scale of a Parisian boulevard lining these long wide streets, small two-storey cottages appear almost at once, and the area they cover, except in the immediate neighbourhood of the Square, is the chief slum neighbourhood. One cannot blame the inhabitants of present-day Birkenhead either for the grandiose ideas of their forefathers or for the slums their fathers built between these streets, but one can deplore the want of respect shown in the upkeep of the heart of their monumental conception by allowing for instance, a corrugated iron garage, in a main street within a stone's throw of the Square. Photograph 90 (page 111) shows a finely designed house and shop at the corner of Hamilton Street and Bridge Street, surrounded by advertisements and incongruous structures. A similar degradation, apart from the proper patina of age, is to be seen even in Hamilton Square itself. In a later portion of this report some suggestions will be made for its arrest.

In 1843 an Act was obtained to lay out Birkenhead Park, an exceptionally bold undertaking for a township of 10,000 inhabitants at a time too when there were no public parks in the great centres of Liverpool, Manchester, Birmingham or Leeds. It was opened in 1847, the design of its layout being by Paxton, the author of the Crystal Palace. The large Ionic entrance in Conway Street shows the same optimism that the great network of unused or partially used streets did, but with perhaps less of an anti-climax.

Docks

The construction of the Egerton and Morpeth Docks, the first to be built, was completed in 1847. Dock construction attracted a great influx of labourers who had to be housed quickly. From this may be dated the loss of a good building tradition in the lower town and the beginning of the slums.

It had been decided to convert the whole of the Wallasey Pool into docks, but the promoters experienced difficulties both technical and financial and could not continue. The Corporation of Liverpool took possession in 1855, and in 1857 a new body, the Mersey Docks and Harbour Board, was formed to administer the Dock Estate in both Liverpool and Birkenhead. Birkenhead thus failed in its ambition to become an independent seaport and only narrowly escaped ruin.

Railways

Dock construction necessitated the connection of the docks with the railway to Chester. This connection was built in 1850, the line running parallel to the lower course of Bridge End Brook and cutting across the rectangular grid of streets already built and leaving awkward triangular patches difficult to utilize. These are now builders' yards and dumps. The ruthless cutting of a diagonal railway across the formal plan of rectangular streets by destroying the meaning of the latter helped to degrade the area and to produce the slums with which it is now largely covered.

River Front

Laird's and other shipbuilding firms set up yards on the river front between 1850 and 1857. This river front was originally picturesque and earlier residents had been proud to think of Birkenhead as a health resort. The public was now excluded from the water front, a misfortune this Plan must try to remedy if only to a small degree.

Residential,
Oxton,
Rock Ferry and
Tranmere

In 1836 Thomas Moorcroft, who had erected a slip at Rock Ferry, formed a company to develop the neighbourhood. To this is due Rock Park, a well laid-out district of good houses, many built in local stone with a river frontage.

By 1840 the dry sandstone site of South Oxton, with its good viewpoints and land useless for agriculture, was being used for large residences and, by 1858 this area was being extended towards Bidston.

In Tranmere a comparable piece of planning to that of Rock Park was Clifton Park, lying between Whetstone Lane and Borough Road, then called the Happy Valley. The houses were built about 1840 for what were then styled 'carriage folk.' However, what was called at the time 'the intolerable nuisance of a pestilential odour spreading from a pool by the gasworks' was probably the reason why this excellent piece of work was stopped about 1853.

Shops

In the 'fifties and 'sixties there were few shops in Tranmere and Oxton, the main shopping centre being near the present market.

1875—*Recovery*

After the failure of the Docks scheme Birkenhead's need was for quiet consolidation. Growth was steady but unspectacular. The town became a parliamentary borough in 1861, and in 1877 incorporated Tranmere, Oxton and the littoral of Higher Bebington, and its development as a dormitory to Liverpool was encouraged by improvements in local transport, both cross-river and internal. The fullest benefit, however, of the ferry service could not accrue until landing-places on both sides of the river had been adapted to the great rise and fall of the tides and the ferry boats themselves made comfortable for winter passage. Hence the importance of the completion first of the floating George Stage at Liverpool in 1847 and then of the floating stage at Woodside in 1862, and the opening of the floating roadway for vehicles in 1868, and the advent of the first *saloon* passenger steamer *Cheshire* in 1864.

After the ambitious town-planning of the 'thirties between the Park and the Docks and its subsequent failure to live up to its ideals (a point for which certain remedies will be submitted), and the Rock Park and Clifton Park developments, the growth of the lower town was either by ribbon building along existing lanes and roads or by dense masses of parallel streets designed to get as many houses as possible to the acre. This lasted until the early days of the present century, when the idea of looser building with a limitation of the number of houses to the acre spread, thanks to the ideas of Ebenezer Howard and Raymond Unwin. From now onwards, therefore, it will be sufficient to give a series of dates marking events which had influence on the town's development.

Shortened History

1860. First tramway from the entrance to the Park along Conway Street to Woodside.
1860. Completion of Great Float, water admitted.
1863. Opening of Union Workhouse on Tranmere Ridge.
1863. Demolition of Tranmere Old Hall, a building of distinction dating from 1590, to make room for cottage property.
1866. Opening of railway from Dock Station to Hoylake.
1870. Division of Great Float into two halves completed.
1870. Borough Road constructed and the Happy Valley destroyed.
1878. Monks' Ferry Station on Chester Railway closed in favour of Woodside Station.
1879. Import of cattle and thence the development of the lairage and slaughter-houses.
1885. Opening of Mersey Park, Tranmere.
1886. Mersey Railway tunnel taken from Green Lane (Tranmere) to James Street, Liverpool.
1888. Extension from Hamilton Square to Park Station giving connection by Wirral Railway to Wallasey and Hoylake and West Kirby.
1891. Extension of Mersey Railway to Rock Ferry.
1892. Extension to Central Low Level, Liverpool.
1895. Opening of Vittoria Dock.
1901. Opening of Victoria Park, Tranmere.
1903. Laird's amalgamated with the Sheffield firm of Cammell and extended their shipyards southwards. In this process the central area of Tranmere Pool was enclosed as a wet dock and the last traces of the ferries to this part of the shore disappeared.
1907. Dedication of Bidston Hill as a public open space.
1912. Opening of Arno Park, Oxton, as a playground and viewpoint.
1927. Arrowe Park purchased and made public, a valuable buffer between the expanding Mersey and Dee sides.
1928. Birkenhead absorbed Prenton, Thingwall and Landican.
1933. Birkenhead absorbed portions of Upton, Bidston and Arrowe.
1934. Opening of the Mersey Tunnel, possibly the most significant fact of all for the future.

From the above sketch it will be seen that at present the three most important functions of Birkenhead are those of a seaport, a shipbuilding town and a dormitory to Liverpool.

Birkenhead as a Seaport

As a seaport it has the two Docks, the West Float ($51\frac{1}{2}$ acres) and the East Float ($59\frac{1}{2}$ acres), each much larger than the largest in Liverpool—the Gladstone Dock of 24 acres. The new Bidston Dock, started in 1935, gives now a hint of almost indefinite potential expansion westwards. The great expanse, however, is badly off for entrances. Compared to the seven entrances to the Central Docks alone on the Liverpool side, Birkenhead has only three and these at right angles to the river instead of at the minimum angle to the tidal scour. One of the Birkenhead entrances, that to the Albert Dock, is 100 feet wide and only exceeded by the 130 foot wide entrance to the Gladstone Docks.

Liverpool dock system is nearer to the industrial area of South Lancashire, especially to the cotton mills, while that of Birkenhead is nearer the Black Country and to North Wales, and is well served both by the Great Western Railway and the London, Midland and Scottish. Improvements in road transport have recently, by the opening of the Mersey Passenger Tunnel, given opportunity for an increased overlap in the two systems. Indeed, if the fares through the Mersey Road Tunnel are abolished for goods, as seems reasonable with what is really a great national highway, the Birkenhead Docks, which are now chiefly export docks, should have their share of the import trade and employ a great many more people. In peacetime their quays were never more than half occupied. The Port of Liverpool, according to the official sailing list (for April 1939) is connected by steamers giving regular service with 500 foreign seaports. Of these Birkenhead is only connected with 49, all astride too, the sea routes to the Far East, via Suez. Of the 58 British ports with regular contacts with the Port of Liverpool none connect with the Birkenhead Docks although Irish and Manx cattle are landed at a floating stage on the river front. The same official guide gives to Birkenhead 124 sailings during April 1939, and 820 to Liverpool.

Birkenhead as a Manufacturing Centre

As a site for manufacturing, Birkenhead participates in the advantages of being in the area of a great seaport. These advantages are not, however, shared equally with its great neighbour. Birkenhead, for instance, could make much fuller use than it does of a fine water-front. On the other hand it suffers a relative disadvantage from the fact that the centre of gravity of Merseyside population lies on the opposite bank, beyond which the crowded industrial area of South Lancashire serves both as a market and a source of fuel. The period of consolidation saw the water-front become increasingly valuable. As a result of dock construction Laird's found their old yard near the present Vittoria Dock inconvenient and removed in 1853 to a site near the head of the Pool. Four years later they moved again to their present site, with its deep water inshore, where, too, a railway touches the river. There were, however, unfortunate results to Birkenhead from this latter move ; one, it brought the dignified district of Hamilton Square into sight and sound of industry and made its decline as a residential area inevitable ; and, two, it ended the role of the Birkenhead littoral as a health resort. By excluding the populace from the shore, too, it left the town distinctly worse off than Liverpool with its breezy landing stage. It is a pity that this great shipbuilding firm, which provides such a large proportion of the industry of the town, did not then move its yards further upstream. Thirdly, it diverted the attention of the Oxton-Claughton community from the lower town, save in its role as a corridor, and intensified the regional social contrasts of the future borough.

In addition to Cammell Laird's, then, various ship-repairing and engineering firms started near-by, but so far appear not to have employed more than 500 men, while Cammell Laird's at the present moment employ 13,000 and in good times before the war 8,000. The unfortunate thing is that under our present system shipbuilding in a period of slump suffers more quickly than any industry. Work in the docks follows suit, so that in bad times Birkenhead is doubly hit with unemployment. Hence the necessity of establishing new industries and giving a broader base to the life of the town.

Animal Industries

Of the existing trades next to the docking of ships and the building of them, what may be called animal industries are at present the most important. The import of cattle, an activity dating from 1879, owes its expansion partly to the proximity of Lancashire markets and the pastures of Central Cheshire, and partly to Birkenhead's traditional trade with Ireland, whence come most of the imported beasts. Because, too, of the liability to the spread of disease among the animals considerable areas are required adjoining the landing-places, and this was easier to provide on the Birkenhead side. The slaughter of cattle is a natural development, and from that have grown a few factories dealing with glue, gelatine, leather and sausage casing, providing employment for some 350 persons.

Milling

Grain warehouses had been erected on the northern side of the East Float before 1871, but it was not until 1899 that the first mill was erected near-by, nor till 1914 the first mill on the Birkenhead side. The grain is handled by means of suction pipes, chains of buckets and endless belts which makes the placing of mills by the waterside desirable; but the more such machinery is used the less people are employed. Although, therefore, the Birkenhead and Wallasey Mills provide imposing structures to the dock landscape they do not, except by the stability of their work, do much to help employment in the town.

Oil Refining and Timber-using Industries

Oil Refining and Timber using industries are naturally located near the Docks and at present employ between them about 500 people. It would seem that there is scope for expansion in both these cases with the long stretches of vacant dock sites.

Tapestry Making

Though Liverpool has lost its one artistic manufacture, that of the Herculaneum Pottery, Birkenhead with A. H. Lee in Stanley Road has a tapestry factory known all over the world as the place where valuable antique tapestries can be safely repaired. It employs 400 workpeople, mostly women.

Birkenhead as a Dormitory

The third great occupation of persons living in Birkenhead is that of working beyond its boundaries. In the census of 1921, first to give occupation records, 63,703 persons are given as employed, of which 17,286 or 27% had their places of work outside the Borough. Of these, 9,918 crossed to Lancashire and 6,747 found work in Cheshire. Of those crossing to Lancashire 717 remained in Liverpool, and of the Cheshire workers 289 were employed in Bebington and Bromborough. The daily influx into these latter townships was a relatively recent phenomenon which began in the 1890's when large-scale manufacturing industries first appeared in them.

The economic interest in Liverpool of the members of the governing body of Birkenhead may be instanced by the fact that in 1938 eleven out of its 46 Justices, and twenty out of its 64 Council members had their places of business in that city.

The main reasons for Birkenhead being to such a large extent a dormitory for Liverpool, since under-river and cross-river traffic was established, appear to be its

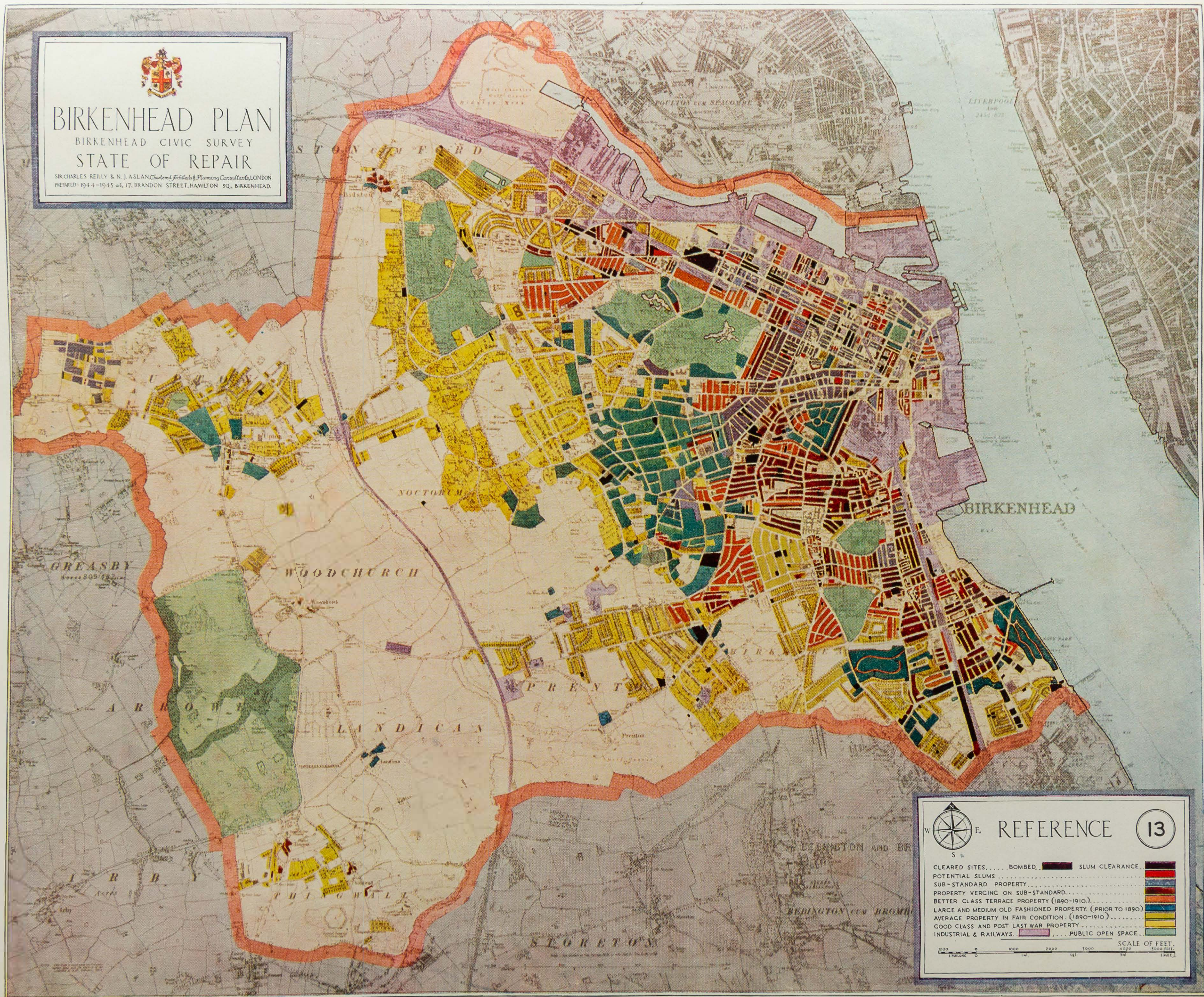
(1) Access to picturesque open country, of which pleasant property names like Mount Pleasant, Prenton, Prospect Hill and Mount View, Tranmere, are evidence;
(2) Better secondary education facilities;
(3) Slightly cheaper land, building materials, and, owing to its market being easily accessible from all parts, slightly cheaper food;
(4) Lesser rates (14*s*. in Birkenhead in 1938-39 against 16*s*. 4*d*. in Liverpool).

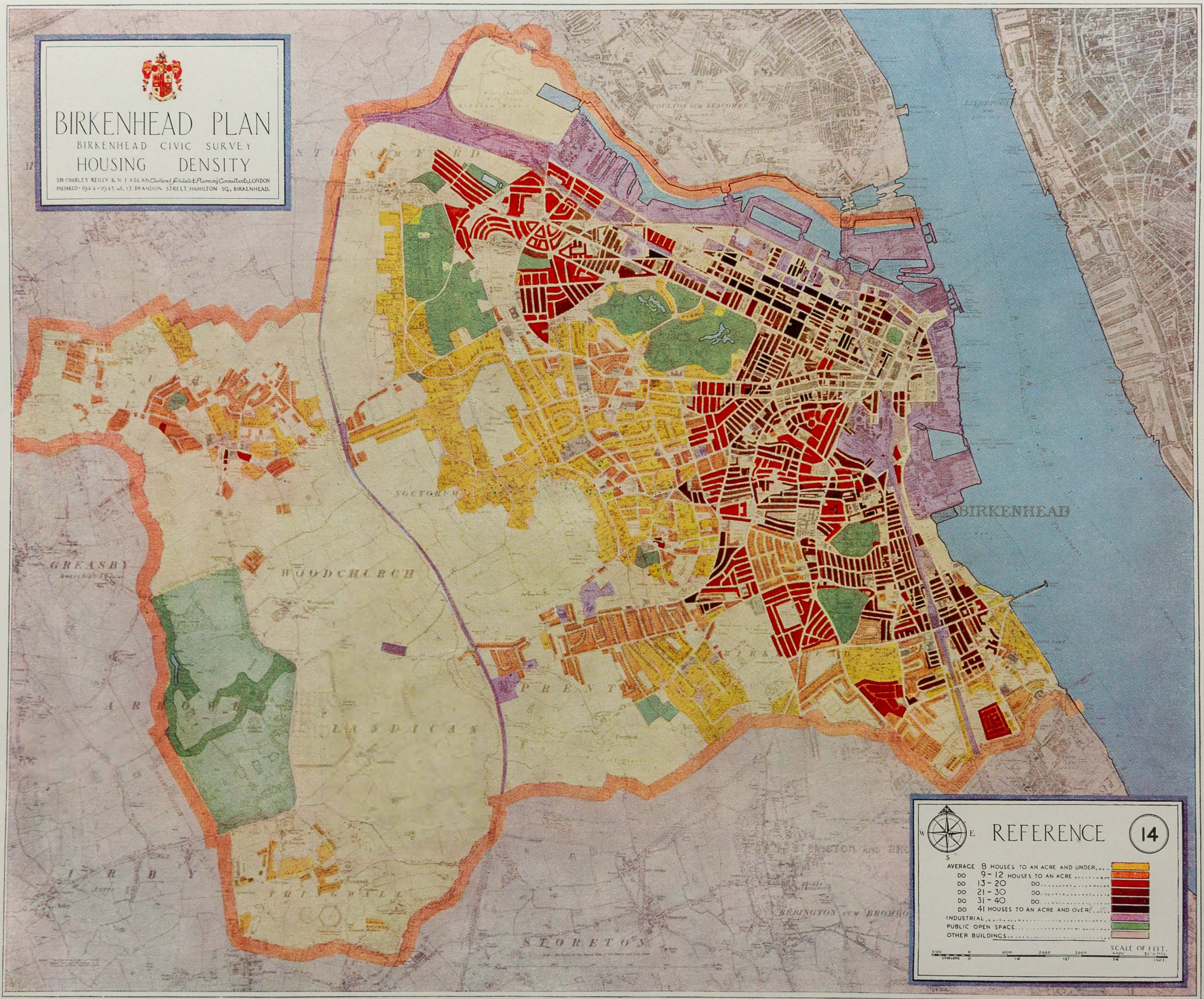
In spite of the fact of a large proportion of Birkenhead inhabitants working outside the town, the different suburbs like Oxton and Claughton appear to have reached, according to Mr. J. E. Allison (Chairman of the Merseyside Geographical Association), a sense of community life in excess of the ordinary suburb. If that is so, it is something to be proud of and something which our plan is designed to foster.

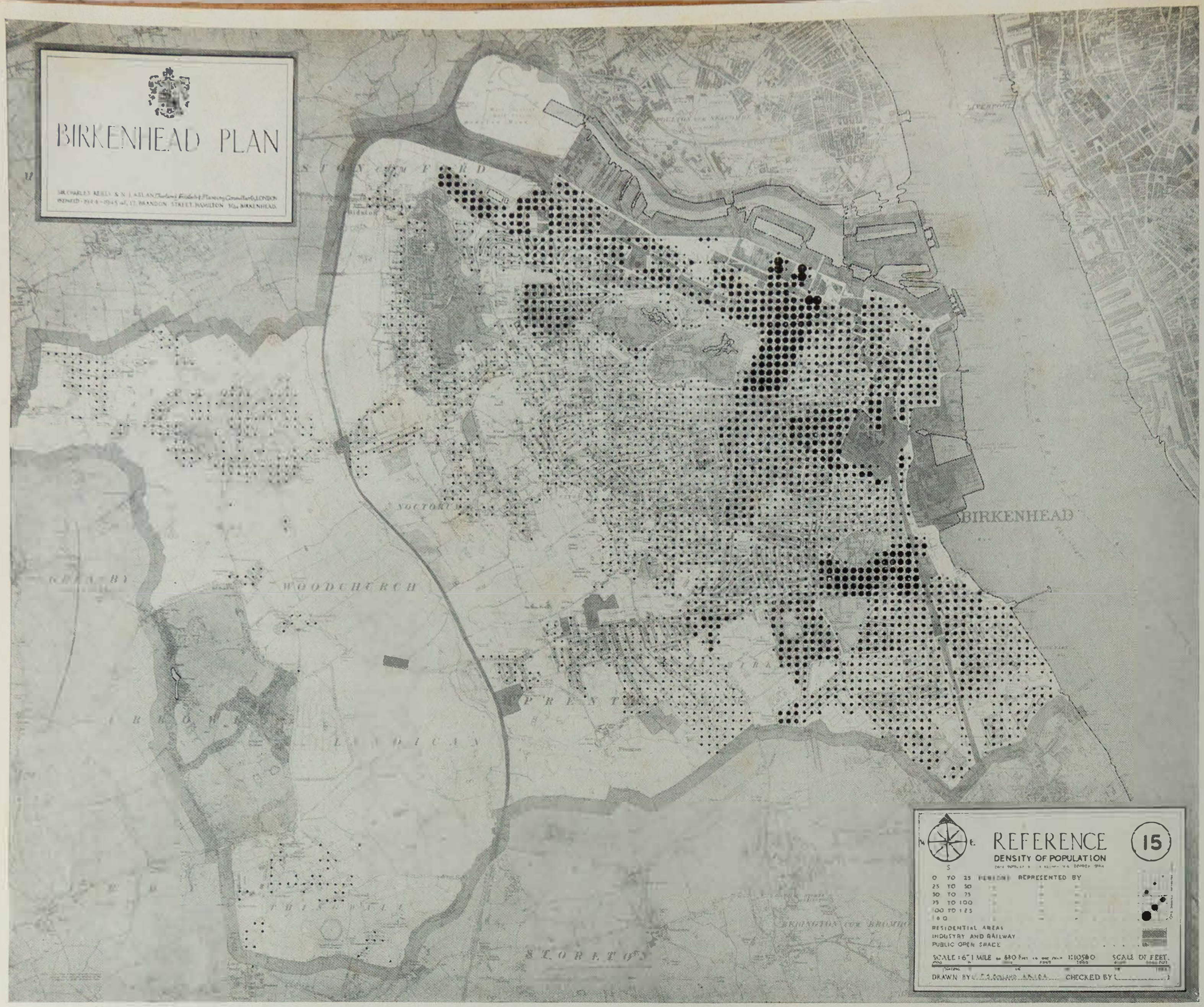
With its hinterland of Wirral, Birkenhead has an asset once invaluable, but now largely being frittered away. The regional plan prepared by Mr. Longstreth Thompson, may save some of this asset by its insistence on green belts round districts and villages, a scheme this plan supports and amplifies, but unless this is adhered to strictly the great advantages for folk working in Liverpool will largely disappear. With the advent of the Tunnel and the motor-car, and possibly the aeroplane, Liverpool people who can will be tempted to live further and further out, leaving Wirral altogether if that is allowed to become still further suburbanised. The rate the destruction has gone through indiscriminate building during the last dozen years is very shocking to one of the authors who is seeing the area afresh after an absence of the same period.

The result of all this is a town centred on the Mersey at Woodside, and with all the main roads leading to it. At this focal point is a small area of fine monumental buildings, though much broken into by unfortunate later additions and quickly degenerating on all sides, but particularly on the north, with slums. The irony of this is that in this direction is a long layout of wide streets meant for further fine buildings which never materialised.

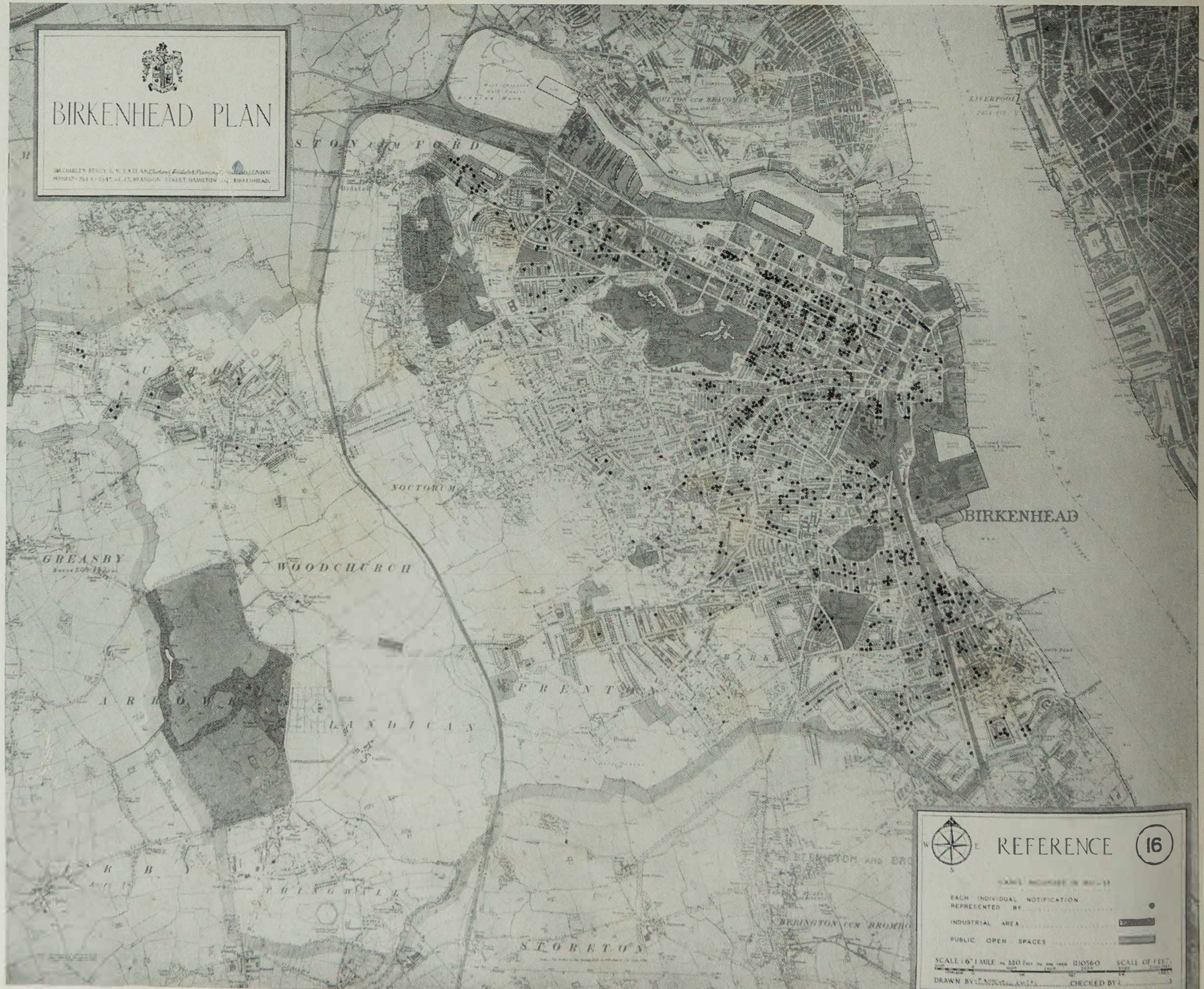
Behind this central focus on the low-lying land is the lower town, densely populated, and then gradually the later and looser suburbs until the Bidston-Storeton ridge is reached, where the wealthy of Liverpool, as well as of Birkenhead, have built their residences. Beyond this ridge is the flat land of Wirral peninsula, which was till recently fine open farming country, but which is now being encroached upon, both from the towns on the Deeside, as well as from those on the Mersey side. If steps are not taken at once to provide green spaces between the villages, all this in spite of a stationary or even declining population for the whole area, will soon become a vast suburban desert.


BIRKENHEAD PLAN
BIRKENHEAD CIVIC SURVEY
STATE OF REPAIR
SIR CHARLES REILLY & N. J. ASLAN, Chartered Architects & Planning Consultants, LONDON
PREPARED: 1944-1945 at, 17, BRANDON STREET, HAMILTON SQ., BIRKENHEAD.
REFERENCE
13
N
W
E
S
CLEARED SITES...... BOMBED.. SLUM CLEARANCE..
POTENTIAL SLUMS
SUB-STANDARD PROPERTY
PROPERTY VERGING ON SUB-STANDARD
BETTER CLASS TERRACE PROPERTY (1890-1910)
LARGE AND MEDIUM OLD FASHIONED PROPERTY (PRIOR TO 1890)
AVERAGE PROPERTY IN FAIR CONDITION (1890-1910)
GOOD CLASS AND POST LAST WAR PROPERTY
INDUSTRIAL & RAILWAYS .... PUBLIC OPEN SPACE
SCALE OF FEET.
1000
0
1000
2000
3000
4000
5000 FEET.
1 FURLONG
1 MILE
BIRKENHEAD
LIVERPOOL
POULTON CUM SEACOMBE
RIVER MERSEY
STONEY FORD
NOCTORUM
WOODCHURCH
LANDICAN
PRENTON
GREASBY
ARROWE
IRBY
THINGWALL
UPTON
BIDSTON
STORETON
BEBINGTON AND BROMBOROUGH
BEBINGTON CUM BROMBOROUGH


BIRKENHEAD PLAN
BIRKENHEAD CIVIC SURVEY
HOUSING DENSITY
SIR CHARLES REILLY & N J ASLAN Chartered Architects & Planning Consultants, LONDON
PREPARED 1944–1945 at, 17, BRANDON STREET, HAMILTON SQ., BIRKENHEAD.
REFERENCE
14
N
S
E
W
AVERAGE 8 HOUSES TO AN ACRE AND UNDER
DO 9–12 HOUSES TO AN ACRE
DO 13–20 DO
DO 21–30 DO
DO 31–40 DO
DO 41 HOUSES TO AN ACRE AND OVER
INDUSTRIAL
PUBLIC OPEN SPACE
OTHER BUILDINGS
SCALE OF FEET.
1000
0
1000
2000
3000
4000
FURLONG
BIRKENHEAD
WOODCHURCH
NOCTORUM
PRENTON
LANDICAN
GREASBY
STORETON
IRBY
THINGWALL



THE GREATEST CONGESTION of population is to be found in the dockside area and in part of Lower Tranmere. Some areas reach the high density of over 700 persons per acre.



OVERCROWDING BRINGS LOW HEALTH STANDARDS, DISEASE AND DEATH. There is almost a direct relationship between unplanned overcrowded dwellings in a bad state of repair and tuberculosis. A similar inference could be drawn for other types of diseases not legally notifiable.

These diseases need not be meekly accepted as necessary evils. Birkenhead's "bad spots" can, and will, be cleaned up.

Section Two

THE BASIS OF THE PLAN

THE AIM OF THE PLAN, as of all such plans, is to harmonize and improve where possible the relation between the individual elements of the town for the happiness and prosperity of all. With this purpose in view a Civic Survey was made as already tabulated. It is on the basis of this survey that our suggestions are made.

There are two main aspects from which the town must be considered. They are

(i) Birkenhead as an independent unit, a well-balanced, harmonious whole;

(ii) Birkenhead as an important component of the Merseyside Region and the most important centre in Wirral, perhaps one day to be 'Wirral City', the recognized capital of the peninsula.

The Present Layout

In spite of the consciously formed layout of practically all the main streets of Birkenhead, which is hardly a century old, little effort was made to segregate and define the different users for the various zones. Equally wide streets lead everywhere. At the two ends of the town, however, the contrast in the existing users is well-defined. At the north and north-east we find industry in docks and shipyards, while in the west and south-west the richer classes have their residential quarters. In between these there exists a mass of very mixed users with the inevitable congestion of slums and squalor, especially in the eastern and north-eastern areas adjacent to or near the industrial region of the town.

Housing

The majority of dwellings in the eastern, central and north-eastern areas, all adjacent to the industrial and business centres of the town, have long since passed their useful life. The State of Repairs Map, No. 13 (page 15), shows clearly the houses in question. It should also be noted that most of these substandard dwellings are at a very high density (see Map No. 14) (page 17), some of them are at over fifty to the acre. We propose that a reconstruction scheme for these areas be carried out in blocks. Thus, as soon as a new block of houses is built, the population of one of the substandard blocks is to be taken *en masse* to the houses in the new dwellings, and reconstruction started at once on the empty site. In this way existing communities will not be so completely broken, loneliness will be avoided and friendships maintained. Meanwhile new housing schemes further afield will be carried out, such as that at Woodchurch, to take the overspill for these and other areas. The proposed new densities will not allow for the rehousing of all on the reconstructed sites, but the plan, suggested for certain districts, of three-storey buildings consisting of a two-storey maisonette above and a flat below, each with its garden and front door and approached from different sides, allows for rehousing at a density of one hundred persons to the acre in fairly spacious and airy surroundings.

Overcrowding

Many workers cannot afford to live far away from their work. This will be true in the days to come as it is a question of time as well as money. Today, as seen in Population Map, No. 15 (opposite), the greatest congestion is in those areas near industry and the docks, where overcrowding in some cases reaches the high pitch of over two hundred persons to the acre. Under present conditions of planning and building this results in low health standards and increase of disease in these areas (see Map No. 16) (opposite). A solution for this overcrowding, while maintaining proximity to work, is given in the scheme mentioned above, which will rehouse a large proportion of the people on or near the same site but with healthy conditions and amenities, and put an end, it is hoped for ever, to the squalor of these areas. This is detailed in the section on Housing. Those who can move out will be received in intake areas such as Woodchurch.

Industry

Birkenhead, depending mainly on its docks and shipyards for employment, has had in the past the great fluctuations so sorely remembered. During the decade which preceded this war the town had a higher percentage of unemployment than the average for the country as a whole, or even for Lancashire. A more balanced local economy, giving better average family incomes, is therefore necessary. It can only be brought about by attracting new industries of types unaffected by seasonable fluctuations and depressions. Full details of the land and facilities provided for this are given in Section 3 on Industry and in Appendix No. 8.

The Business and Civic Centre

The position of the business centre of the town has always been well related to the industrial and residential quarters. Its more squalid areas, however, have had to be replanned. After careful consideration it has been determined to maintain the Civic Centre where it is, but to give it enlarged quarters and better facilities. If an amalgamation of the various Boroughs and District Councils of Wirral comes about, we suggest the slopes of Bidston Hill towards Wallasey would be the most suitable spot for the new Civic Centre of 'Wirral City.'

Shopping Centre

The present chief shopping centre of Birkenhead round about Grange Road has suffered greatly through its proximity to Liverpool. As it is today, it is not worthy of so large a town. For similar reasons it loses the possibility of serving its natural hinterland of Wirral. Grange Road, although blessed with the absence of through traffic, is not adequately equipped either with services or amenities. These we suggest our Plan would provide.

The section on the Shopping Centre—7 (*b*) and Map 49 (page 78), gives comprehensive details of the scheme. We have also proposed that the Wirral long-distance 'bus station should be placed at the end of the eastern vista of Grange Road, which if rebuilt as suggested, with the series of tall glass sentinel blocks for stores, would make a tempting vista to shoppers immediately on their arrival in the town.

Communications

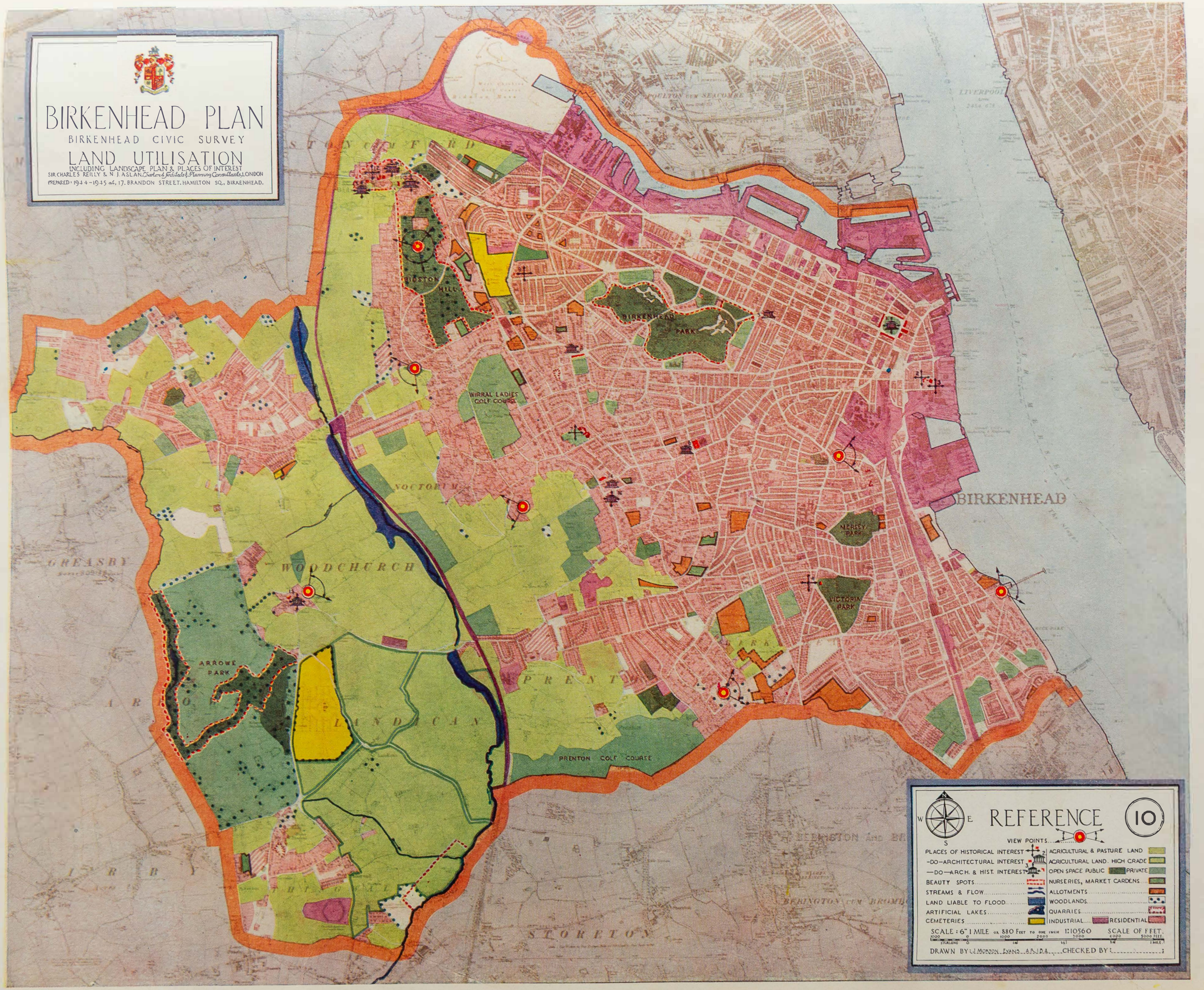
Birkenhead has always been a pocket where the bulk of its traffic, industrial dock traffic, has had to come in and then to go out again the way it came in, that is mainly along the New Chester Road. When in Birkenhead such traffic has found its own favourite short cuts to reach its destination. The gridiron plan of wide roads has helped this process so much there is hardly a wide route in the heart of the town free from the heavy vehicles. It is today a common sight from the portico of the Town Hall to see a string of multi-ton lorries, fully loaded, wind their way round the Square to get to or from the docks.

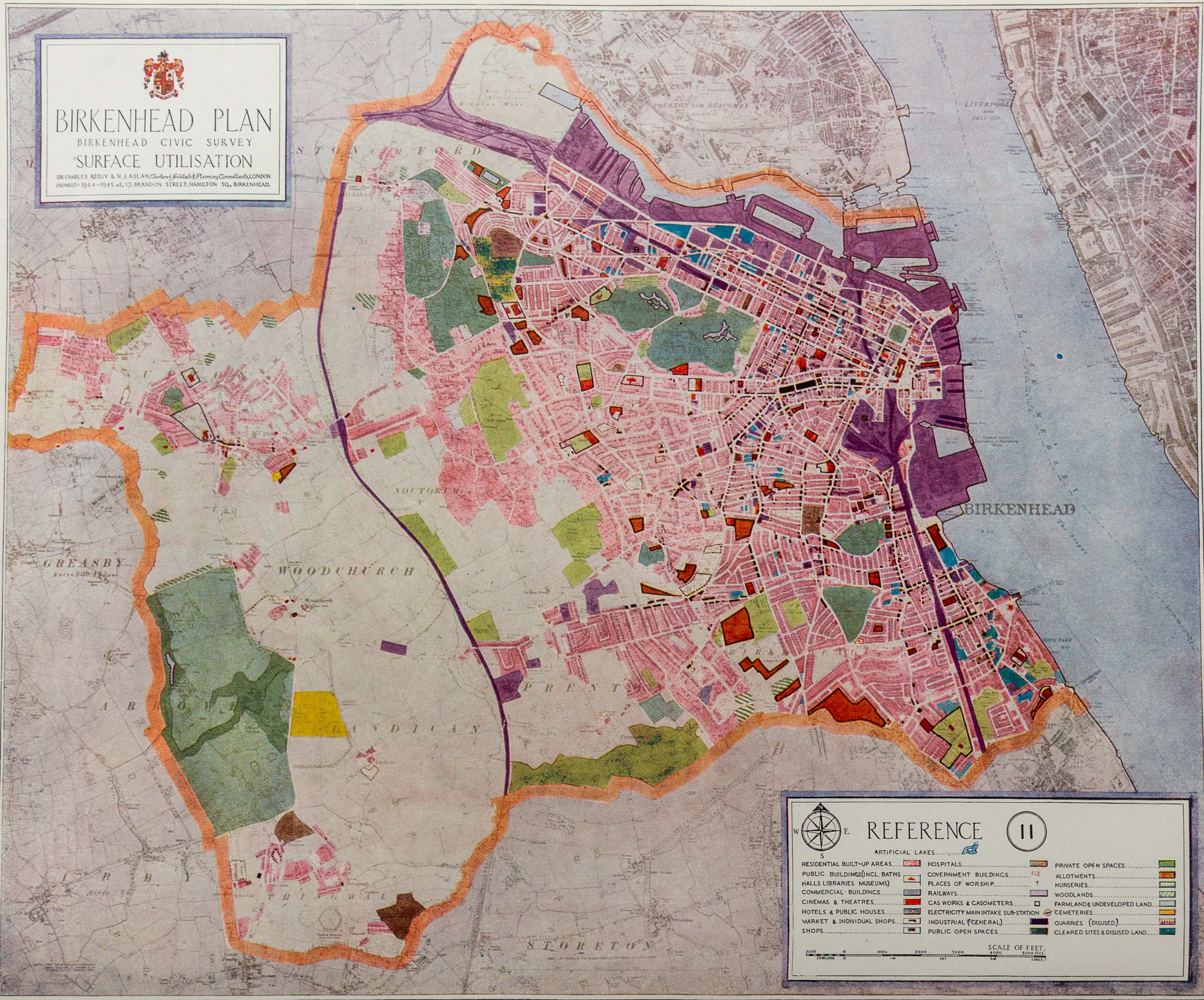
The arrival of the Mersey Tunnel made the situation still worse. The Traffic Statistics Map No. 24 (page 23) and the Accident Map No. 25 (page 23) show clearly the deterioration which has taken place. Conway Street and Park Road North are today death-traps for children on their way to school or to the Park.

After study of statistics and prolonged examination of the situation, we believe we have found a good solution for the traffic by a method offering a direct and easy access to the motorist from the time he enters Birkenhead until he arrives at his destination. The traffic problems and their solutions are analysed in Section No. 4 and in Appendix No. 9.

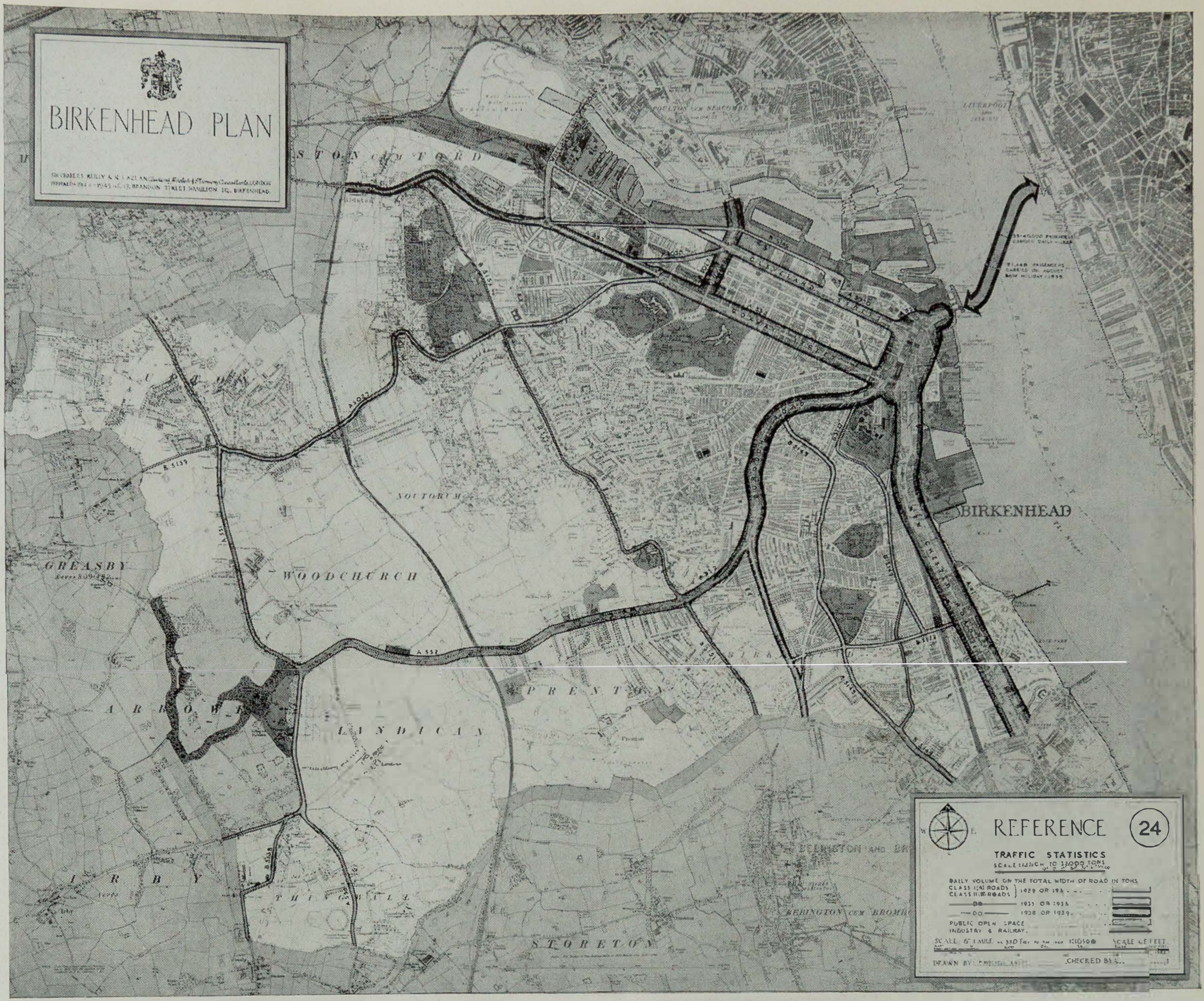
Open Spaces and Amenities

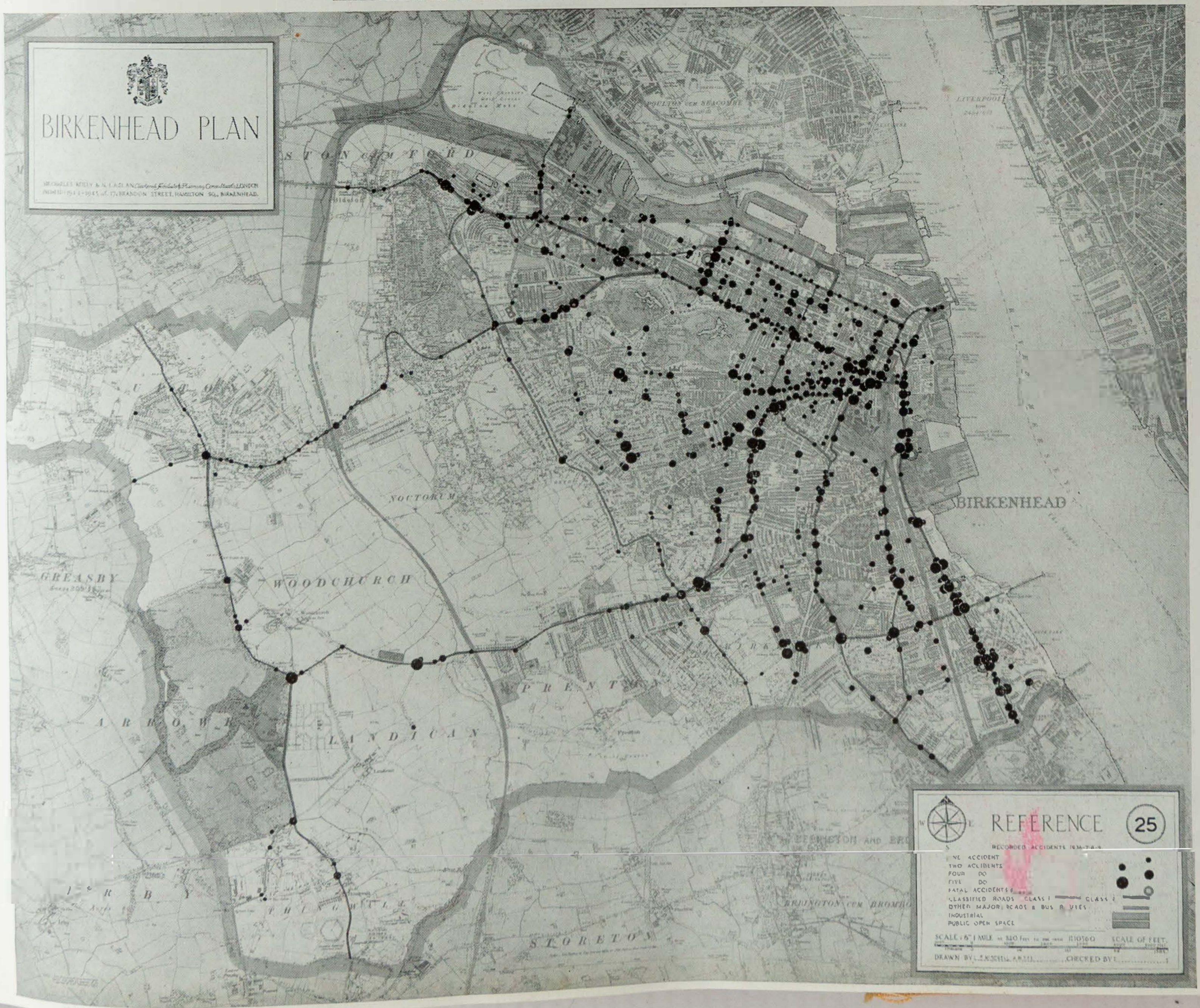
Birkenhead has large open spaces well over the average for similarly-sized towns, but they are not well distributed. Further open spaces, largely in the form of green wedges and belts, are proposed for this purpose. These, where possible, have been designed to protect and preserve the special character of the district where such exists. A riverside walk is proposed for Birkenhead so that the town can once again see and enjoy its river.


BIRKENHEAD PLAN
BIRKENHEAD CIVIC SURVEY
LAND UTILISATION
INCLUDING LANDSCAPE PLAN & PLACES OF INTEREST
SIR CHARLES REILLY & N. J. ASLAN, Chartered Architects & Planning Consultants, LONDON
PREPARED: 1944–1945 at, 17. BRANDON STREET. HAMILTON SQ., BIRKENHEAD.
REFERENCE
10
N
W
E
S
VIEW POINTS
PLACES OF HISTORICAL INTEREST
-DO-ARCHITECTURAL INTEREST
—DO—ARCH. & HIST. INTEREST
BEAUTY SPOTS
STREAMS & FLOW
LAND LIABLE TO FLOOD
ARTIFICIAL LAKES
CEMETERIES
AGRICULTURAL & PASTURE LAND
AGRICULTURAL LAND. HIGH GRADE
OPEN SPACE PUBLIC
PRIVATE
NURSERIES, MARKET GARDENS
ALLOTMENTS
WOODLANDS
QUARRIES
INDUSTRIAL
RESIDENTIAL
SCALE: 6" 1 MILE or 880 Feet to one inch 1:10560
SCALE OF FEET.
1000 0 1000 2000 3000 4000 5000 FEET.
1 FURLONG 0 1/4 1/2 3/4 1 MILE.
DRAWN BY: J. Morton Evans A.R.I.B.A.
CHECKED BY:
LIVERPOOL
BIRKENHEAD
BIRKENHEAD PARK
BIDSTON HILL
WIRRAL LADIES GOLF COURSE
NOCTORUM
WOODCHURCH
GREASBY
ARROWE PARK
LANDICAN
PRENTON GOLF COURSE
MERSEY PARK
VICTORIA PARK
STORETON


BIRKENHEAD PLAN
BIRKENHEAD CIVIC SURVEY
SURFACE UTILISATION
SIR CHARLES REILLY & N. J. ASLAN, Chartered Architects & Planning Consultants, LONDON
PREPARED: 1944–1945 at, 17, BRANDON STREET, HAMILTON SQ., BIRKENHEAD.
REFERENCE
11
N
W
E
S
ARTIFICIAL LAKES
RESIDENTIAL BUILT-UP AREAS
PUBLIC BUILDINGS (INCL. BATHS HALLS LIBRARIES MUSEUMS)
COMMERCIAL BUILDINGS
CINEMAS & THEATRES
HOTELS & PUBLIC HOUSES
MARKET & INDIVIDUAL SHOPS
SHOPS
HOSPITALS
GOVERNMENT BUILDINGS
PLACES OF WORSHIP
RAILWAYS
GAS WORKS & GASOMETERS
ELECTRICITY MAIN INTAKE SUB-STATION
INDUSTRIAL (GENERAL)
PUBLIC OPEN SPACES
PRIVATE OPEN SPACES
ALLOTMENTS
NURSERIES
WOODLANDS
FARMLAND & UNDEVELOPED LAND
CEMETERIES
QUARRIES (DISUSED)
CLEARED SITES & DISUSED LAND
SCALE OF FEET.
1000
0
1000
2000
3000
4000
5000 FEET.
1 FURLONG
0
1 MILE.
BIRKENHEAD
LIVERPOOL
POULTON CUM SEACOMBE
NOCTORUM
WOODCHURCH
GREASBY
LANDICAN
PRENTON
STORETON

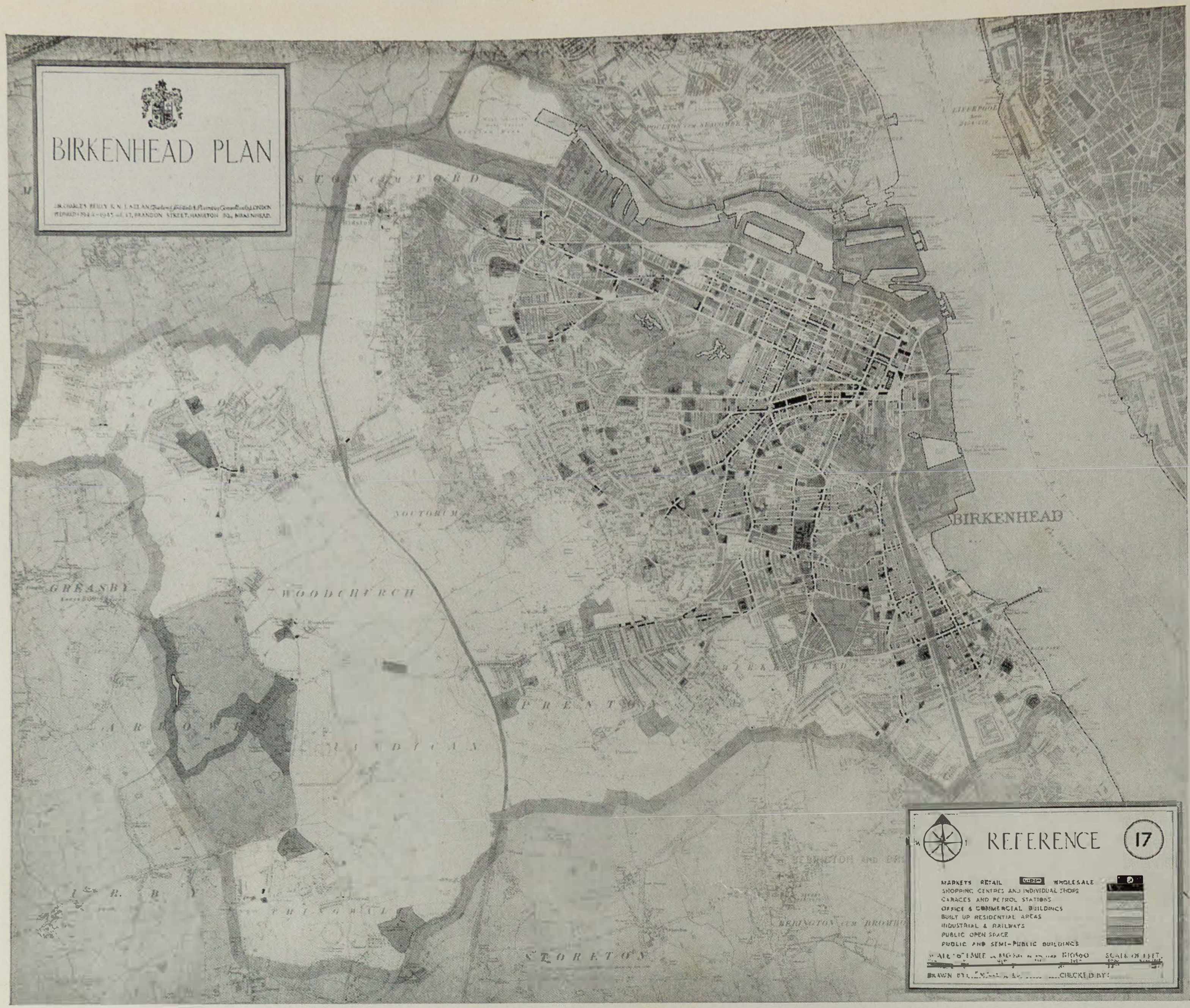
THE RECENT DEVELOPMENT OF ROAD TRANSPORT came with startling suddenness in Birkenhead as in the country generally. As a result it has rarely been possible to make quick adaptations of old roads to ensure both speed and safety. Note the convergence of traffic routes on the Hamilton Square — Woodside nucleus.





NOTE THE BAD SPOTS:— New Chester Road, Chester Street, Borough Road, Duke Street and Claughton Road.

NOTE THE DANGER SPOTS:— Conway Street and Park Road North, which must be crossed by children on their way to School and Park.

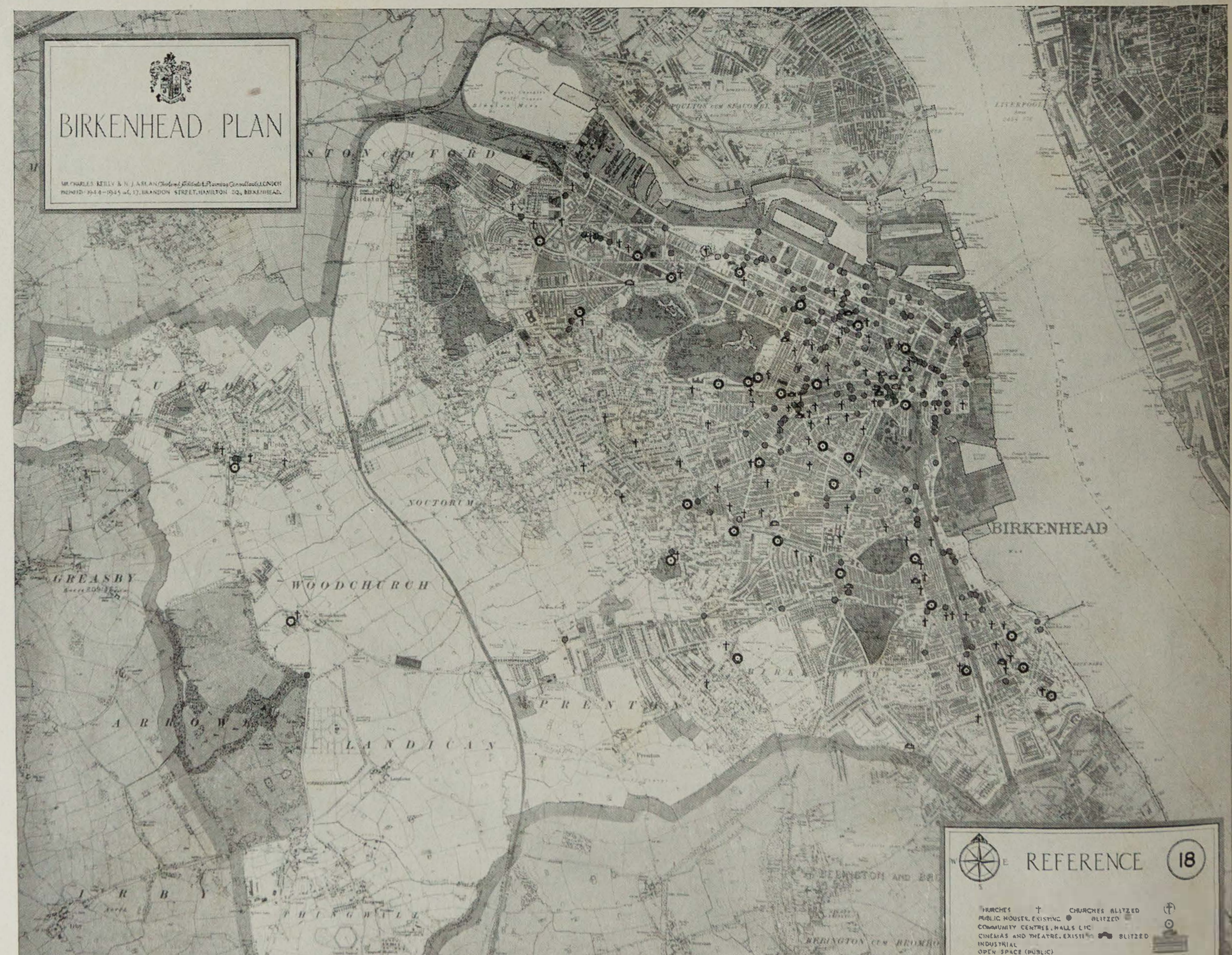


DISTRIBUTION OF SHOPS. In the neighbourhood of the waterfront street corners have been turned into shops regardless of the need for it, and many of these shops are now empty and boarded up.

In contrast, certain areas such as Noctorum, Lower Prenton and Egerton Park are lacking in shopping facilities, a state of affairs causing waste of time.

PRESENT SOCIAL AMENITIES. In the centre of the town public houses are overcrowded; in the South and South-west they are more scarce.

There is a lack of churches in some districts, e.g., in Thingwall and Noctorum.



Largely for the same purpose a tall glass cafe and dance hall is suggested (see page 119) for a site on the river next the Woodside Ferry already occupied by the Corporation.

Small open spaces and recreation grounds within the residential areas are largely lacking. Such open spaces, varying in size from half to four acres, are proposed and distributed evenly over the dense residential areas so that practically every child will have an open space where he or she can play with the neighbouring children just outside the home and under the eyes of the mother.

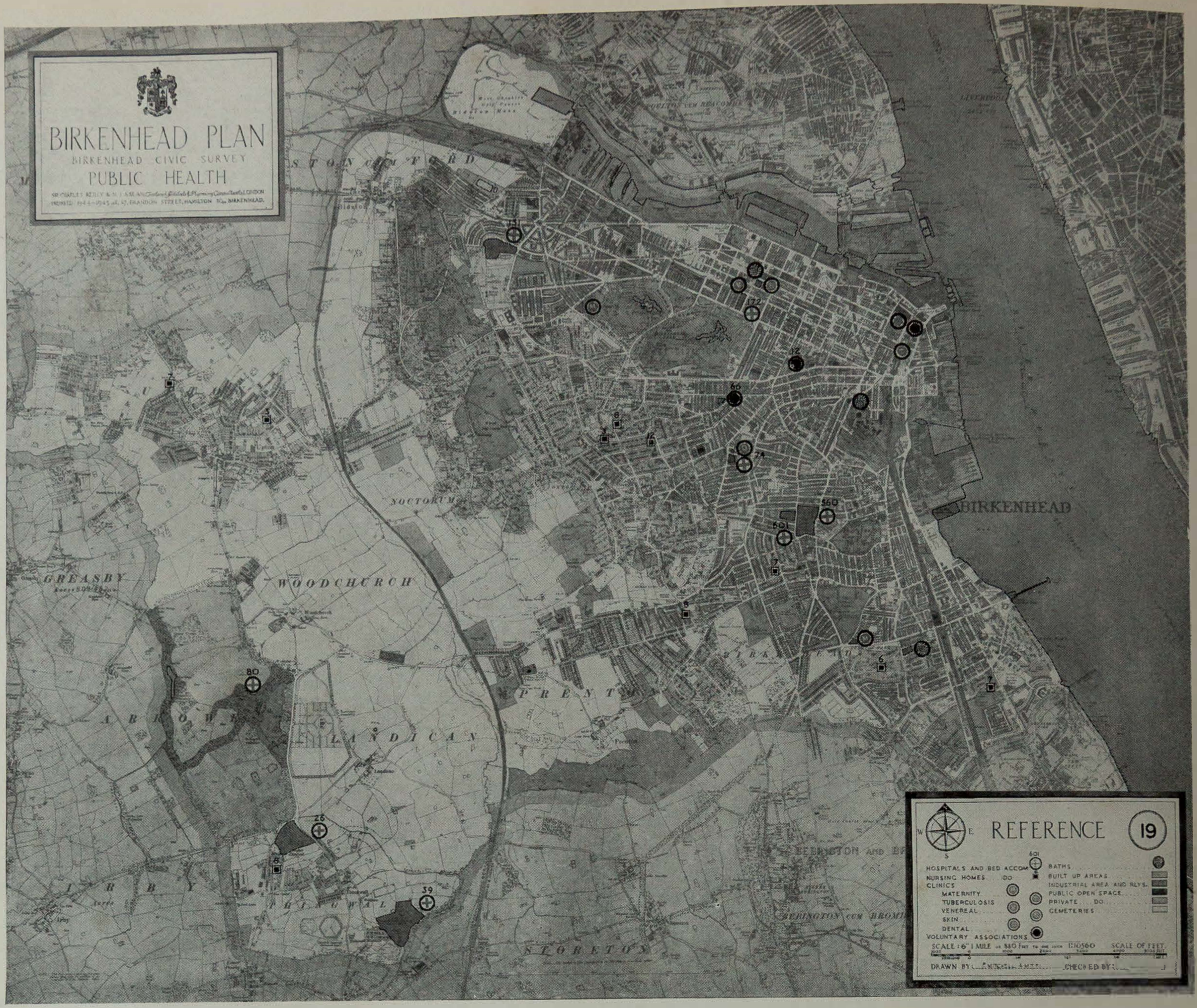
Social Centres

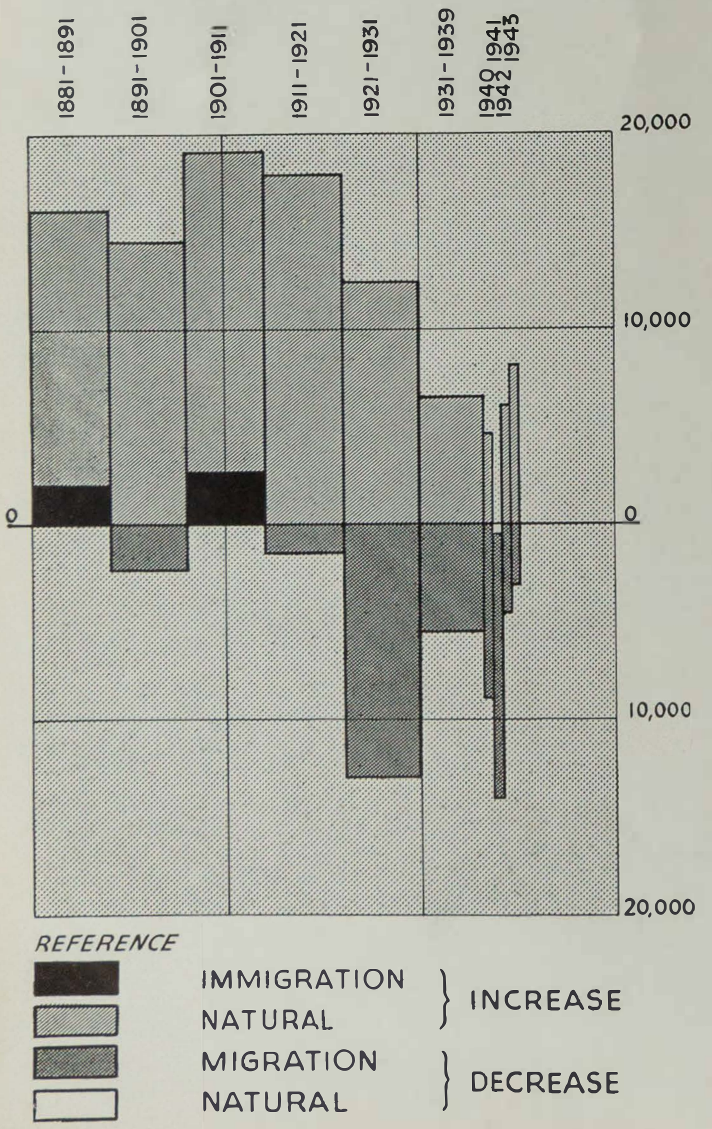
An Academic Centre, a Theatre and Amusement Centre, Local Community and Shopping Centres, Schools, Hospitals, Sports Centres, Baths and Bus Stations have all been studied and proposals have been made according to needs. These are detailed in the latter part of this Report and shown on various maps.

The solutions we suggest for Birkenhead's difficulties and our proposals for her development are, on the whole, long-term proposals though much can be done at once. We suggest a period of forty years for the completion of the scheme. All that time building will in any case continue. Our scheme is merely that it should in future be done to a plan and not in haphazard fashion as in the more recent past. A century ago there was such a plan which only took twenty-five years to carry out. We do not therefore consider we are over-idealistic or architectural in our suggestions if spread over a period of forty years.

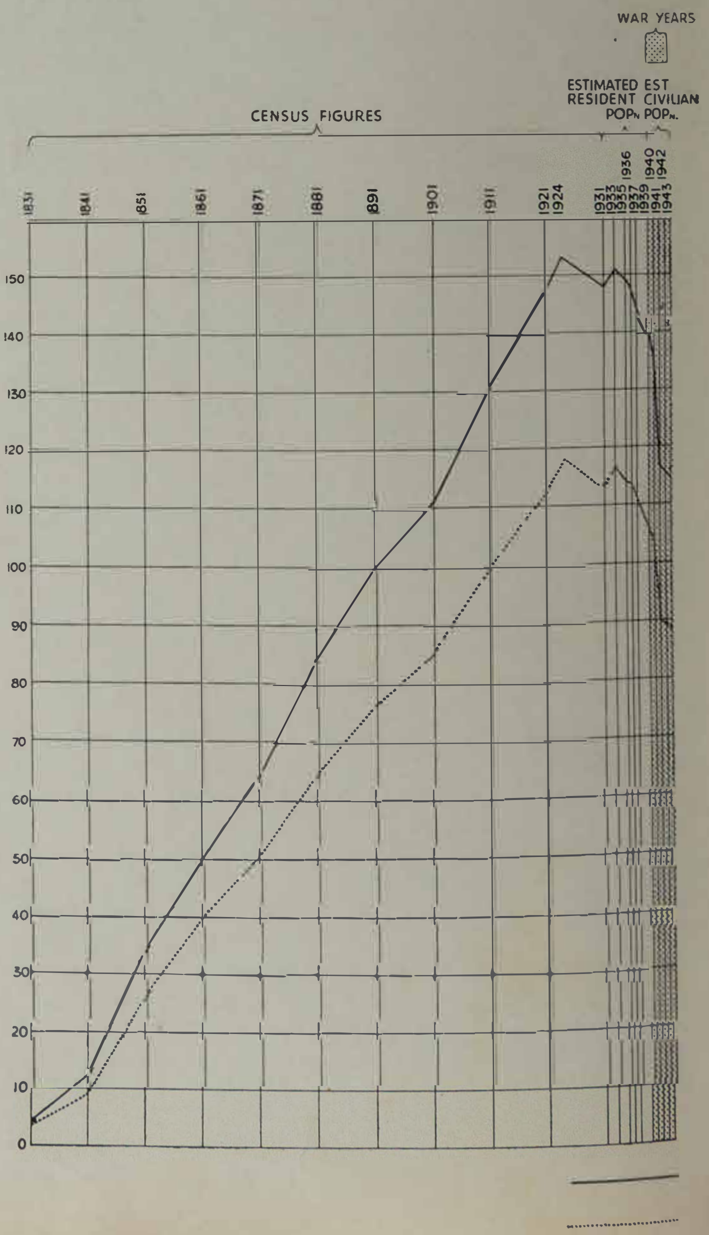
INDUSTRY, OCCUPATIONS AND EMPLOYMENT

IN BIRKENHEAD THE HEALTH CENTRES are apparently confined to the eastern and south-western sides of the town. They are lacking along the Bidston-Prenton ridge and in the central area of the borough generally.





THE POPULATION OF BIRKENHEAD showed a steady increase from the middle of the 19th century until the 1920's when it reached its maximum of about 152,000. The tendency of the last twenty years has been for population to decline. It is regarded as unreasonable to assume a future population of over 150,000.



Section Three

INDUSTRY

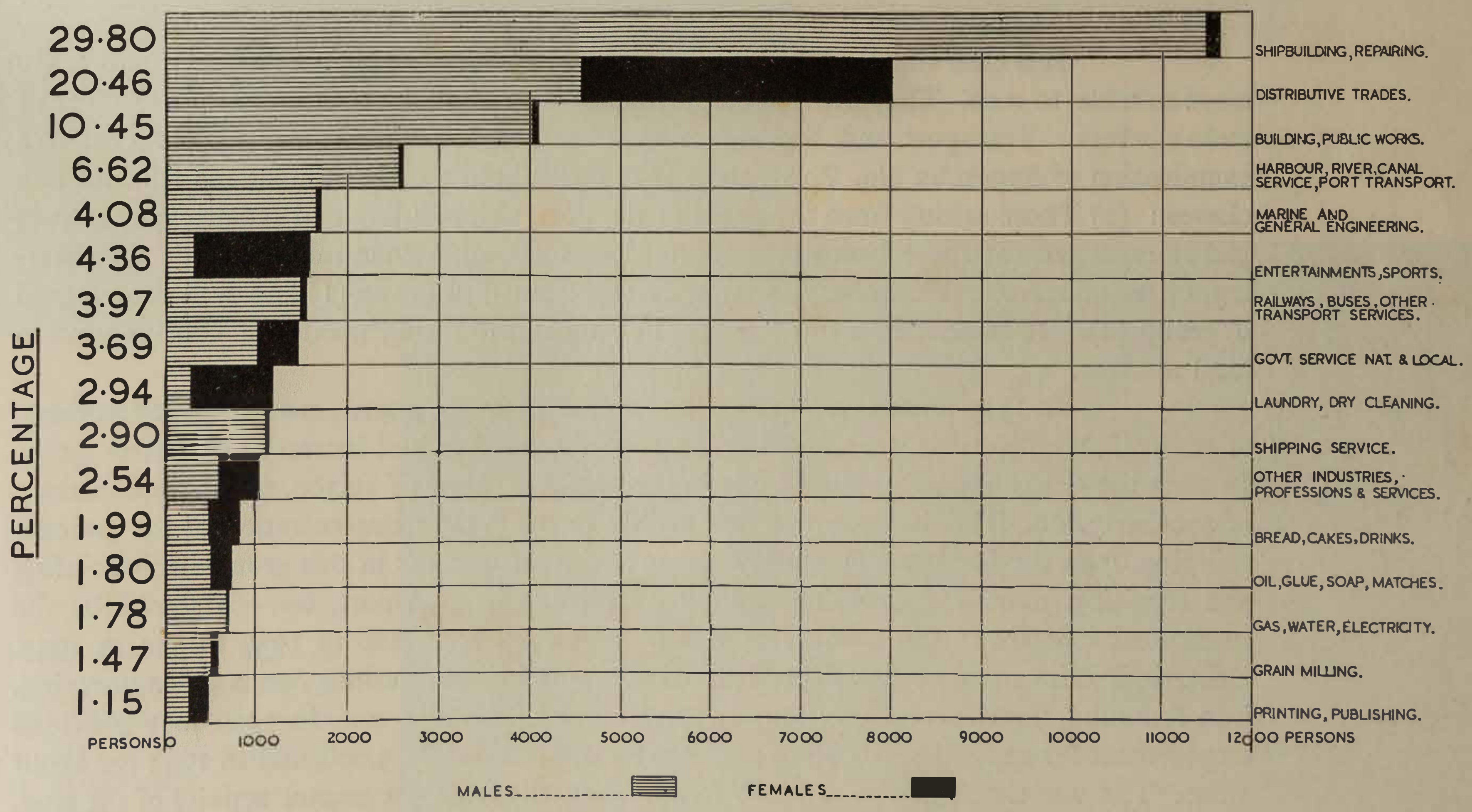
OCCUPATIONS AND EMPLOYMENT

AS LATE AS 1824 Birkenhead, as has already been stated, was a collection of farms and homesteads. By 1850 a complete town had sprung up with wide streets, some several miles long, a town centre, a park—the first in the North—and a railway connecting Wallasey Pool docks to the rest of the country. The main factors behind this development were the activities associated with dock and shipyard.

Since then all the principal industries which have made their home in Birkenhead have been industries directly or indirectly connected with the port, although in the course of time a complex of occupations has been added to them.

It is the aim of this Plan to sort out these occupations, provide them with services and facilities, eliminate any hindrance which may be standing in the way of their prosperity, and at the same time provide opportunities for new industries in order to achieve a more balanced local economy. The deficiency of the existing economy is particularly apparent whenever there is a depression in the port activities. During the decade preceding the war, Birkenhead's percentage of unemployment was higher, not only than the national average but also than the average of the Lancashire area. This is shown on the graph of percentages of unemployment and Appendices 4 and 5.

Appendix No. 6 shows a comprehensive list of those insured persons for the years 1929, 1939 and 1943. For our purpose Employment figures for 1939 are analysed and they show the following percentages:



OCCUPATIONS IN BIRKENHEAD DURING 1939

From the preceding diagram it will be seen that the manufacturing industries of Birkenhead offer comparatively few opportunities for female employment. Of the employed females 19.6% were engaged in industries as compared with 28.7% in Liverpool and 32.8% in Bootle. In 1931 Personal Service, Commerce and Finance, Public Administration and the Professions employed 13,069 out of 17,088 female workers, i.e., 76.4%.

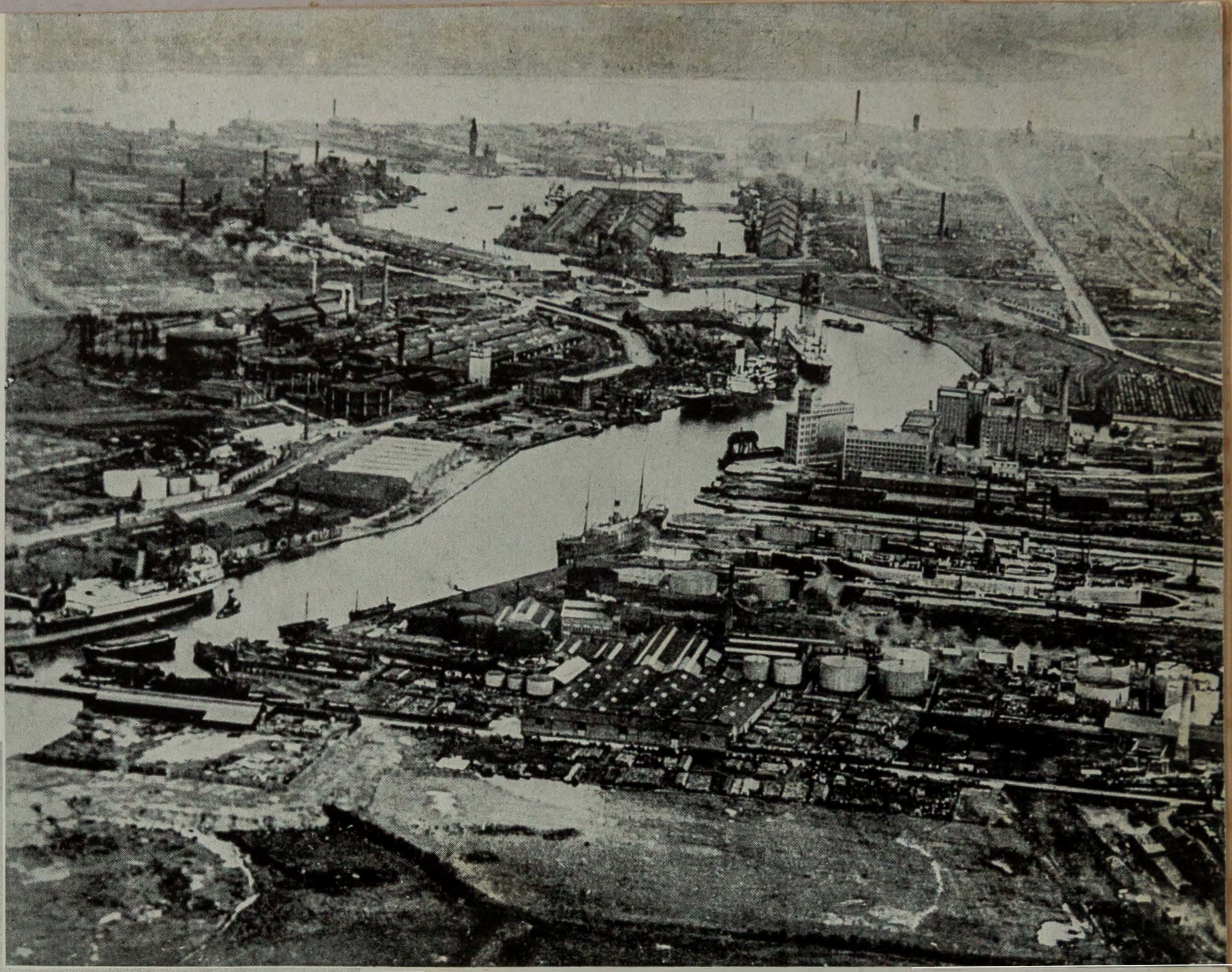
The following schedule shows the main sources of employment for female workers resident in the town, and the percentages of such workers employed.

Main Sources of Employment for Female Workers.

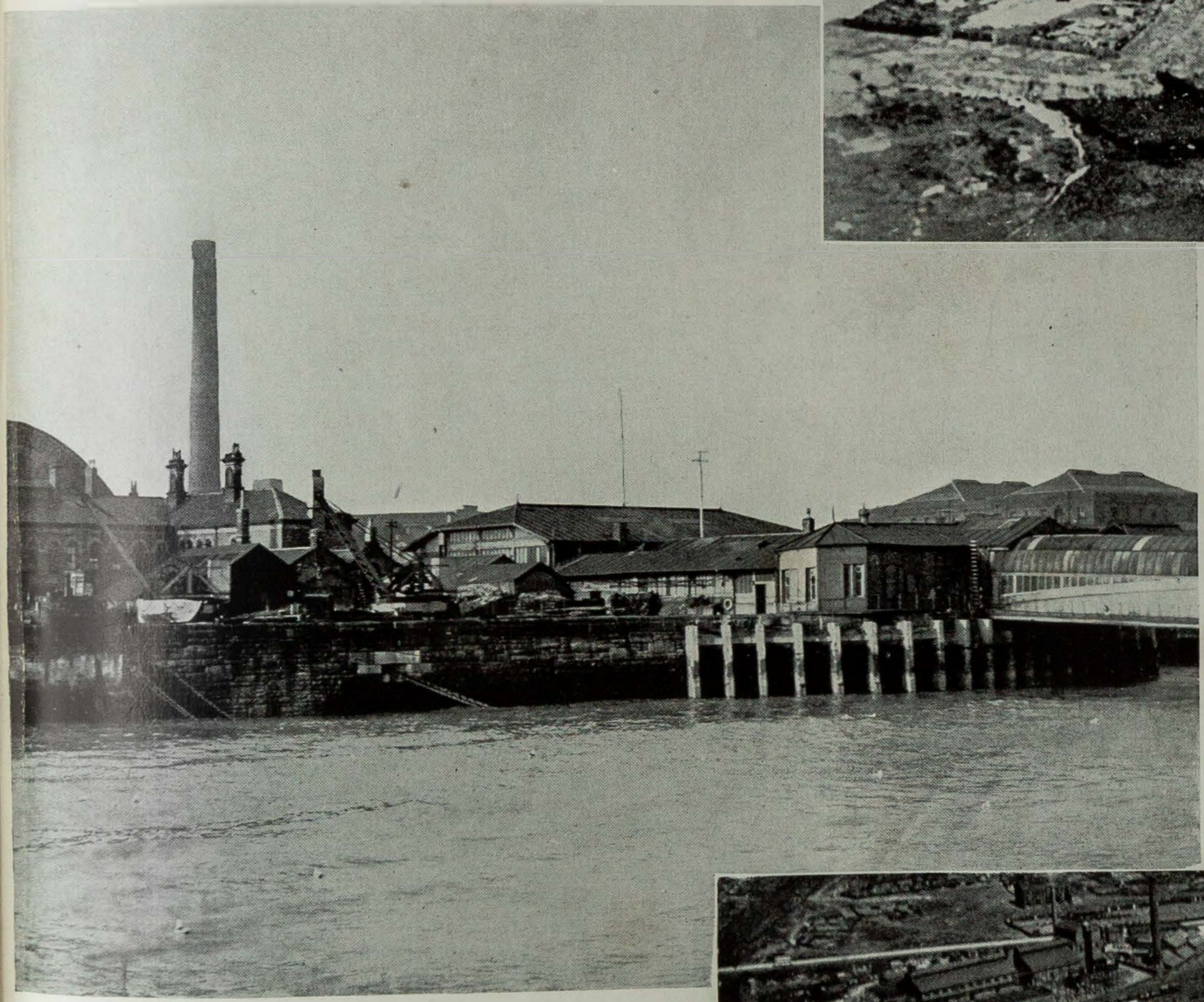
	1921			1931		
	Females	Total	%	Females	Total	%
(1) XVI Personal Service	4,224	5,227	80.8	6,139	7,570	81.0
XVII Commerce, Finance	2,756	7,352	37.4	4,506	12,536	35.8
XVIII Public Administration	1,095	3,669	29.8	1,384	4,590	30.1
IX Clothing	700	1,066	65.6	478	878	54.4
XIX Professions	700	1,204	57.3	1,040	1,971	57.8
X Food, Drink, Tobacco	624	1,742	35.8	851	2,336	36.3
VII Textiles, Textile Goods	346	419	82.5	266	371	71.6
(2) All Industries		45,496		17,083	52,910	32.2
(1)	10,445			14,664, i.e., 85.8% of all F.		

It is clear that the present manufacturing industries, being of a heavy nature, are more suitable to men. They provide employment for more than 50% of the total number of male workers. Transport and Storage provide employment for another 25 per cent. An examination of Appendix No. 7 will show that Birkenhead's main occupations fall into two classes : (1) Those arising from the needs of the Port, shipbuilding and repairing, transport and storage, and (2) those based on imported raw materials—grain milling, cattle slaughtering, oil refining, etc. Birkenhead is strongly represented in group (1) and well represented in group (2). It is *weak* in a third group, i.e., those producing goods for consumption in local markets.

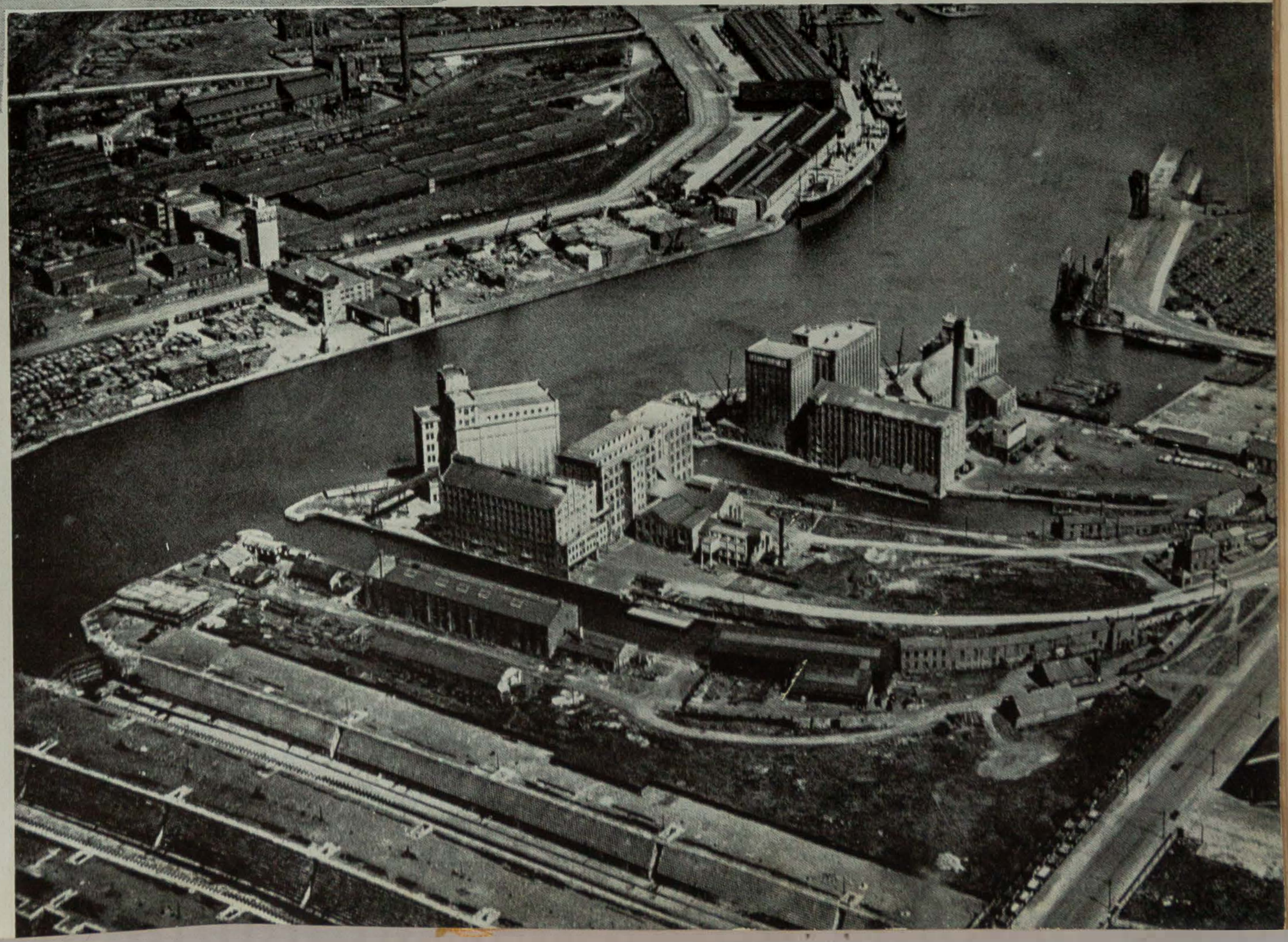
In 1929 the first group provided employment for approximately 13,000 workers, of whom fewer than 200 were females. In 1939 the number had increased by nearly 3,000. In 1943 the total number employed was in the neighbourhood of 19,300, a war-time increase of another 3,000. This increase was due mainly to the greater concentration of the national shipping upon the Mersey. The heavy nature of the occupations in this group—shipbuilding and repairing, marine engineering, shipping service, port transport, etc.—is shown by the small total increase in the number of women employed from 166 in 1939 to 554 in 1943. Other industries more or less dependent on the port include various forms of engineering, iron founding, metal processing, railway service, road transport, etc. In 1929 they provided employment for approximately 2,500; in 1939 for approximately 3,000, and in 1943 for about 5,000. The war-time increase of 2,000 follows naturally from the greater activity of the port.



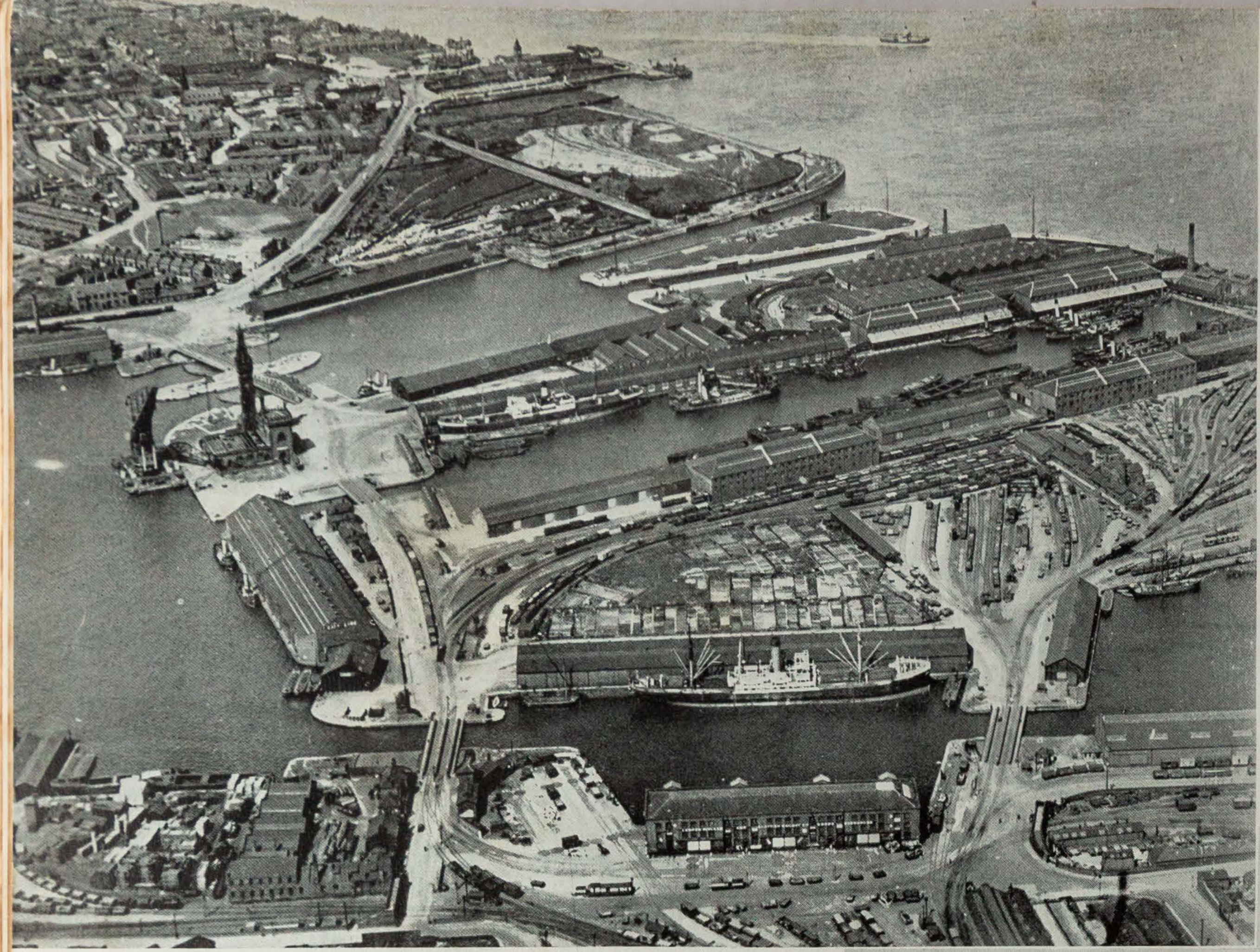
DOCKS AND DOCKLAND. Note the Oil Store and Refinery in the foreground and the graving docks, flour mills and coal wharves in the middle distance. Beyond are the long straight dockland streets. Wallasey lies to the left.



THE COAL STORAGE DUMP at Woodside. This occupies a fine site of which better use could be made.

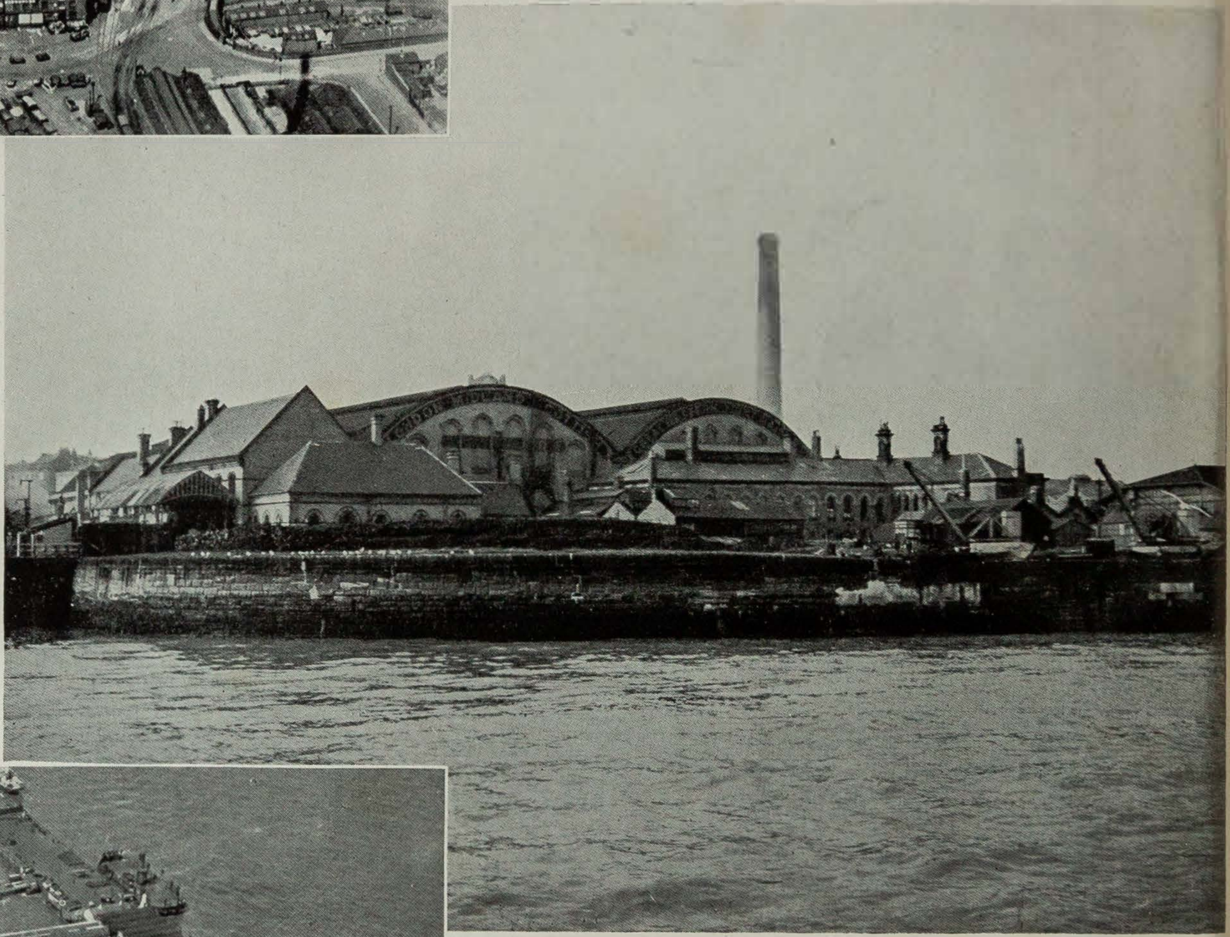


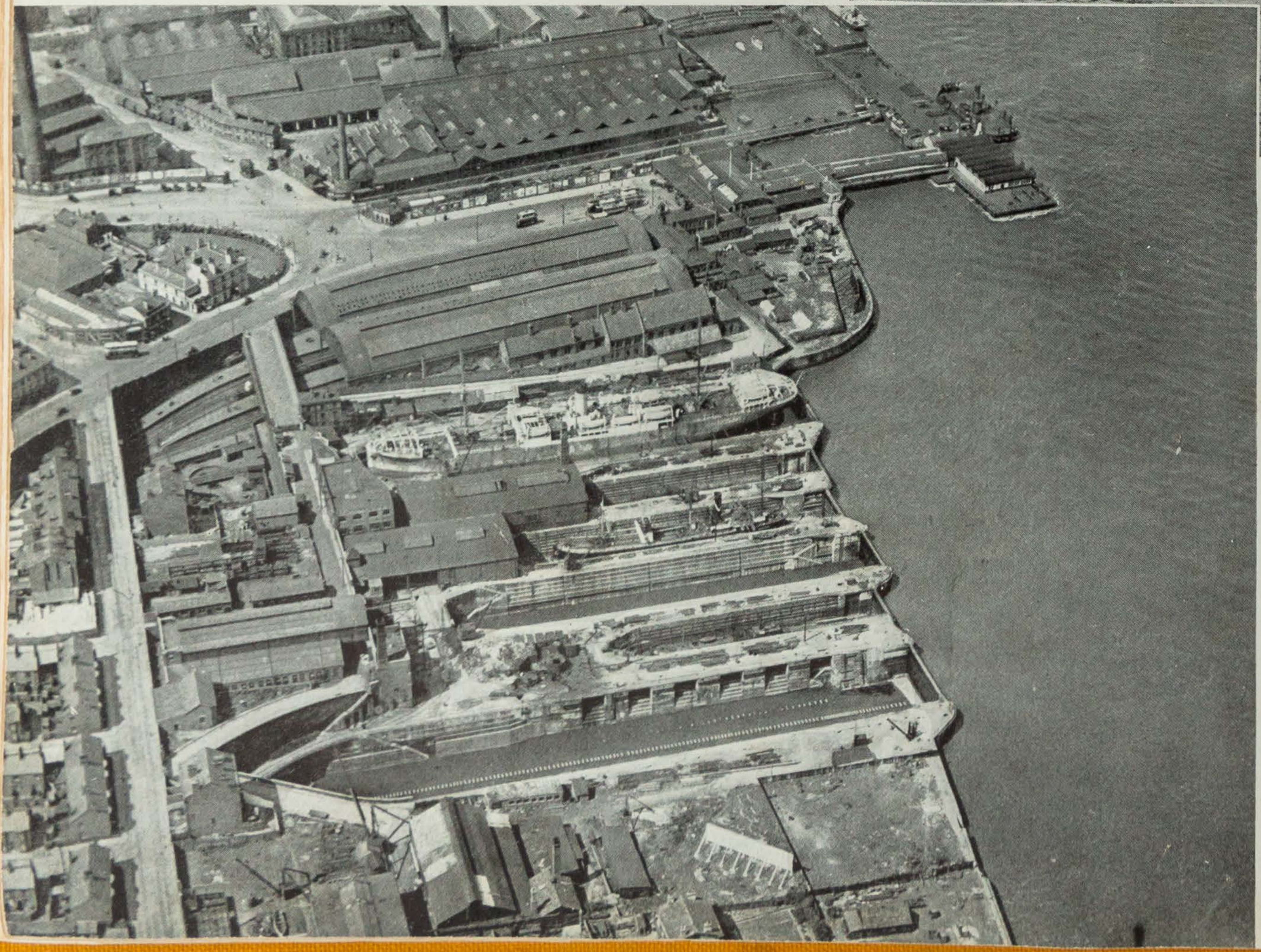
DOCKSIDE FLOUR MILLS and the Gillbrook Basin. Birkenhead has great advantages for dockside industry, especially for the reduction of imported raw materials at low fuel cost.



THE " FOUR BRIDGES " ROUTE across the docks between Egerton Dock, Birkenhead, and Seacombe Ferry, Wallasey. Birkenhead's trade is mainly with the Far East. Between the two wars the river entrances and inner entrances to the Alfred Dock (Seacombe) were widened to permit the use of the Birkenhead docks system by the largest vessels using the Suez Canal.

WOODSIDE STATION, a main line railway terminus with immense possibilities.





THE WOODSIDE AREA showing the Landing Stage, the Ferry Approach Road, Woodside Railway Station, Woodside Hotel (in its semi-circular grounds) and the graving docks of Grayson, Rollo and Clover Docks Ltd.

The less heavy character of the trades is demonstrated by the increase of females employed from 225 in 1939 to nearly 2,000 in 1943.

The second group of industries, those processing imported raw materials, records an expected reduction in the volume of employment from 2,900 in 1929 (or 3,295 in 1939) to 2,449 in 1943. Examples are as follows:

Trade	1929	1939	1943
Saw-milling	169	608	64
Furniture	265	215	103
Oil, Glue, etc.	871	704	744
Paints, etc.	36	—	—
Tanning	223	310	237
Textiles	286	245	52

On the other hand, increases in employment are recorded for:

Trade	1929	1939	1943
Oil, etc.	—	699	744
Grain-milling	—	366	699
Food	81	137	141

The nett reduction in employment has not been considerable, and in the most important subsidiary industry, grain-milling, Birkenhead has improved upon its pre-war position. The great war-time importance of the port, as against other ports, and the more equal distribution of the work of the port between the two sides of the river, account for the maintained stability of these industries.

Shipbuilding and Repairing

Shipbuilding and repairing are the main elements in Birkenhead's industrial structure. Census occupation figures for 1921-1931 are given as 11,807 and 2,868 respectively. They employ predominantly male labour (97%). The volume of employment fluctuates considerably, e.g., in 1937 the industries provided employment for 8,162 males, in 1938 for 10,436, and in 1939 for approximately 12,000. The outstanding firm is Cammell Lairds which normally can provide employment for about 8,000 workers. It builds as well as repairs ships. Other firms are engaged mainly in ship-repairing, and vary in size from small workshops of twenty to thirty men to concerns of 400 workers. Some are engaged exclusively in ship-repairing and others are merely subsidiary departments of the major shipping firms. Altogether there about 50 such firms fairly evenly divided between Lancashire and Cheshire; because of Cammell Lairds, Birkenhead employs about half of the whole Merseyside labour engaged in shipbuilding and repairing.

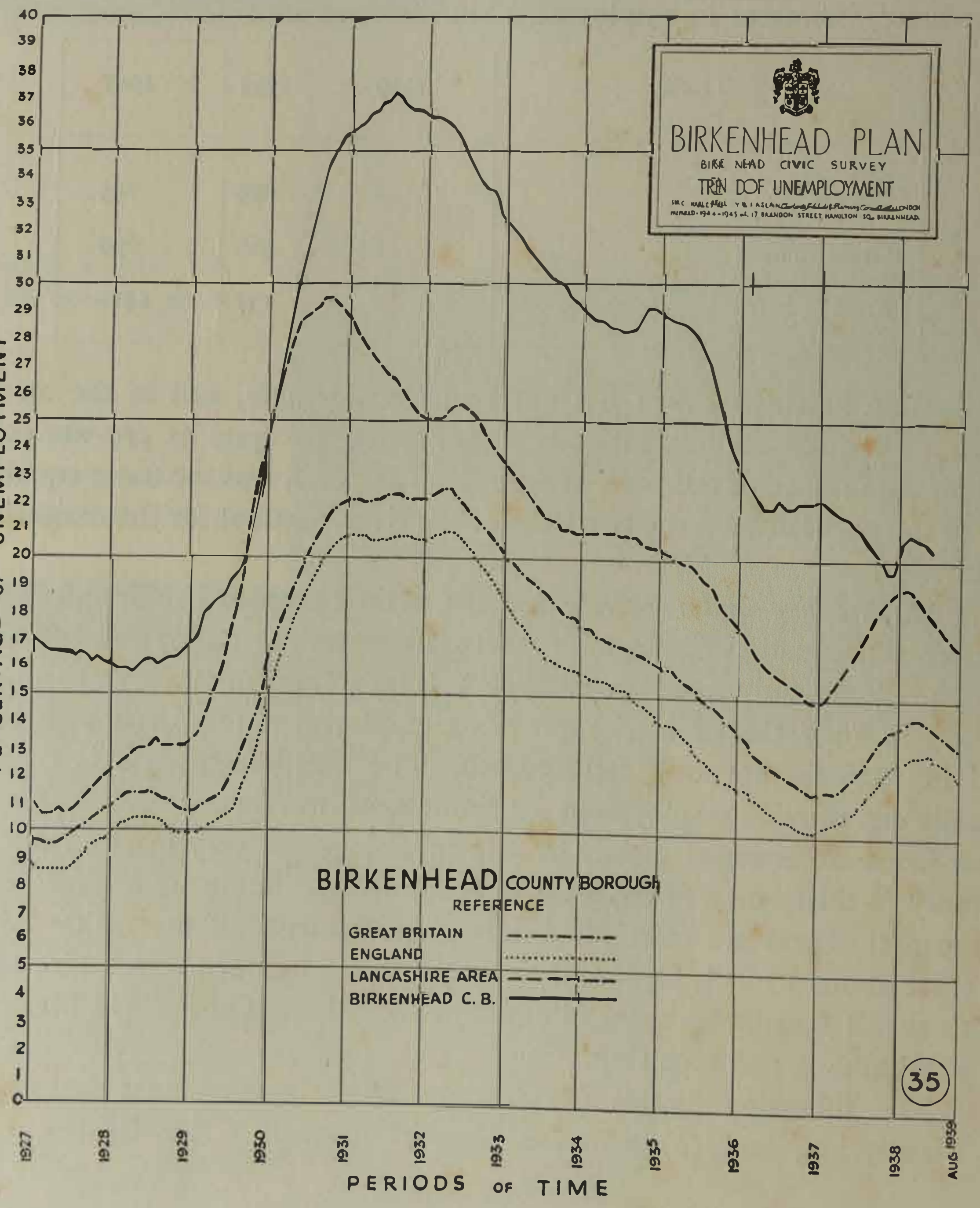
The following figures (*a*) describe recent employment and unemployment trends on Merseyside, and (*b*) compare Merseyside with Great Britain and Northern Ireland.

Table (a) MERSEYSIDE

	(1) Insured	(2) Unemployed	(3) Employed. Nos.	(4) Index	(5) (2) as percentage of (1)	Unemployed age of Men 18-64
1929	22,102	6.432	15,670	100	29.1	30.6
1932	19,240	10,746	8,494	54	55·9	57·9
1939	20,960	5,839	15,121	97	27·9	29·4

Table (b) % OF GREAT BRITAIN AND NORTHERN IRELAND

	Insured	Unemployed	Employed
1929	8.4	12.6	7·4
1932	8.3	7·5	9.6
1939	8.9	15.1	7·7



It is clear that, apart from the year 1932 (a very bad year for the industry), Merseyside's unemployment position was worse than that for the country as a whole. The increase in unemployment, and the reduced volume of persons attached to the industry, explain the low index of attraction, the departure of workers to other industries, and some of them, doubtless, to other places.

The foregoing tables reveal the uneven nature of the employment trends of the shipbuilding and repairing industries. This unevenness is not unique to Birkenhead, nor to Merseyside, but is shared with the national and world industries. World production in shipbuilding (in million tons) varied from 2.4 in 1909-1913 to 4.2 in 1919-1924, to 2.4 in 1924-1929 to 1.3 in 1930-1934, to 2.7 in 1929 to 1.6 in 1931, to 4.8 in 1933 to .96 in 1934 and to 2.6 in 1937. Britain's share of world trade showed great variations, but the ultimate trend (between 1927 and 1938) was downward, i.e., from 53.6 to 20.8 per cent. Thus the national industry possesses a surplus capacity of 30-40%, reduced somewhat by the activities of the National Shipbuilders' Security Limited. It has been argued that this surplus capacity is not excessive when regard is paid to the inevitable fluctuations in commerce and to national security. It has been estimated that approximately 80,000 workers, i.e., one-third of the total employed, migrated to other industries. As we have seen, Birkenhead could not escape its share of these adversities, and indeed received more than its due.

A major planning problem for Birkenhead concerns the future size and status of shipbuilding and repairing. Clearly, international and national decisions on these industries will be taken in some form and will determine, in the main, the fate of the constituent centres. A more adequate control than that provided in the pre-war years by the National Shipbuilders' Security Limited would seem to be needed. Birkenhead's great need is to provide more even security of tenure for its shipyard workers, or, if this is impracticable, to attract new industries capable of utilising the skill of the workers redundant to or only occasionally employed in the shipyards. The low index of attraction shows how labour has adapted itself to the fluctuation of the industry, e.g., by migration to other kinds of employment. Male employment in Birkenhead is far too dependent on the fortune of a single industry (25.9% of the total employed in all industries, and over 50% of all males employed in 1921.)

A connected social problem concerns the housing conditions of all classes of shipyard workers. Their need is to be resident near the shipyards, and differences due to skill or to rates of remuneration do little or nothing to persuade workers to live in more distant and less congested places. The casual nature of their employment and the consequent income fluctuations are a prime cause of overcrowding.

Grain

Grain. The Port of Liverpool was recognised as a warehousing port in 1805, and now handles over twenty per cent of the total grain imports into Great Britain. The Docks and Harbour Board have provided special facilities for storing grain in Birkenhead to a maximum of 31,000 tons. The Port claims to be the greatest milling centre in the world, and employment is distributed between Liverpool-Bootle (2,400) and Birkenhead-Wallasey (1,400). On the Birkenhead site the mills are sited round the Float and provide steady employment. Because essential processes are mechanised and manual employment consists therefore mainly in *assisting* in the cleaning and filling of sacks, and in transport, the industry does not provide that great volume of employment which might be expected.

Cattle

Cattle. Birkenhead enjoys a monopoly of Merseyside cattle imports and possesses special wharfing and slaughterhouse accommodation. It is the chief port of entry into Great Britain for cattle from Ireland and Canada, and in 1939 provided employment for approximately 500 men. There was a decrease in the normal volume of employment due, in part, to the aftermath of the British-Irish dispute, but mainly to a new Government policy designed to encourage the import of cattle for store and to discourage the import of fat stock for slaughtering. Nevertheless, the importation of cattle for slaughtering is a fairly stable element in the economy of Birkenhead. Industries connected with the slaughtering of cattle and represented in Birkenhead are those connected with glue and gelatine, leather, hides, oil, dripping, sausage cases, etc. These are small undertakings, and only one firm (The British Leather Co.) employs more than 50 workers.

Other Industries

Other Industries of local importance are oil refining and storage, and those utilising timber, e.g., constructional toys, saw milling, furniture, coopers' work, etc. Their derivative nature and dependence upon the docks are obvious. *For complete list of Distribution of Industrial Population see Appendix 7.*

INDUSTRIAL PROPOSALS

To provide a more balanced economy Birkenhead must have more sites for new industries, especially light industries, and these preferably of a consumer type such as food (jams, biscuits, cakes, meats, sweets and drinks), clothing, plastic fittings, wood and cabinet-making, and bedding.

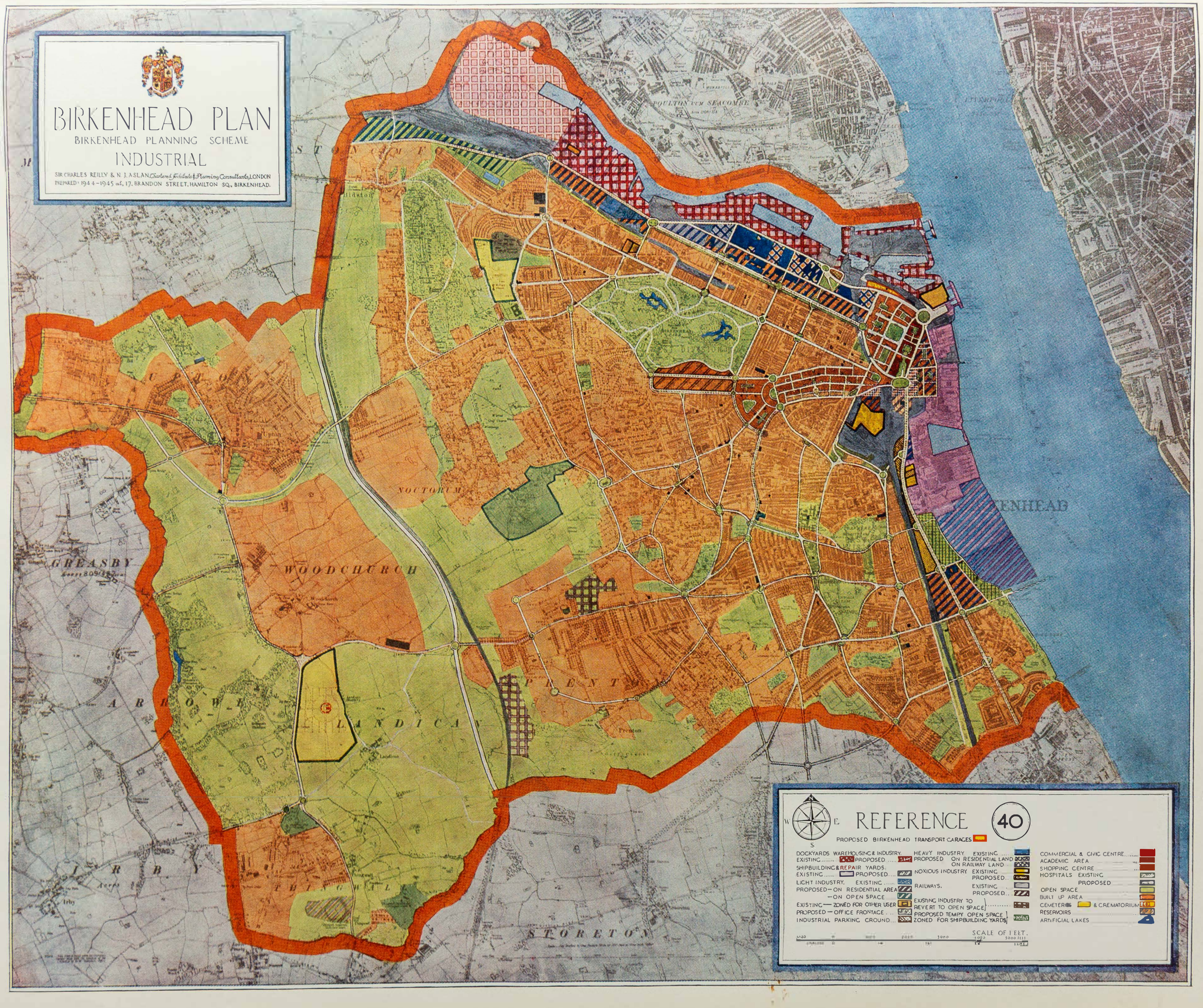
These industries, when once introduced, will have the following advantages:

(1) A varied and good supply of labour is at hand in Birkenhead as well as in the region.
(2) Raw materials brought into the port are also at hand. Their use involves little or no further transport expenses.
(3) A great consumer market, especially if the goods tolls of the Mersey Tunnel are abolished, is also at hand—again with great savings in overhead charges and transport.
(4) Birkenhead factories being adjacent to the port, overhead and transport charges are again brought to a minimum for merchants and exporters of goods to overseas markets.
(5) With the proposed great housing programme in the region labour will be assured of good homes which are a great moral and social asset for the industry.
(6) First-class transport facilities by rail, road, water and underground, will, if the plan is carried out, connect the industrial sites with the outlying region.
(7) Last, but not least, Birkenhead and Wirral can offer good homes for owners and managers of industry, in districts whose amenities and beauty compare very favourably with those of any similar district in the country.

INDUSTRIAL SITES

The major sites proposed on the plan for new industry are:

(1) All the area north of Price Street which is not yet industrialised to be mainly for heavy industry and warehouses, especially for imported goods.
(2) The area north of the underground railway running parallel to Beaufort Road for light trade and industry.
(3) All the area north of the proposed Bidston By-pass, including the Bidston Dock area, for dock extension and industry.
(4) The area between Canning Street and Bridge Street for the offices, garages and workshops of the Birkenhead 'bus transport.
(5) The existing lands belonging to the Mersey Docks and Harbour Board and the railway companies, north of Canning Street, Bridge Street, Corporation Road and


BIRKENHEAD PLAN
BIRKENHEAD PLANNING SCHEME
INDUSTRIAL
SIR CHARLES REILLY & N. J. ASLAN, Chartered Architects & Planning Consultants, LONDON
PREPARED: 1944–1945 at, 17, BRANDON STREET, HAMILTON SQ., BIRKENHEAD.
REFERENCE
40
N
S
E
W
PROPOSED BIRKENHEAD TRANSPORT GARAGES
DOCKYARDS WAREHOUSING & INDUSTRY.
EXISTING
PROPOSED
SHIPBUILDING & REPAIR YARDS.
EXISTING
PROPOSED
LIGHT INDUSTRY. EXISTING
PROPOSED — ON RESIDENTIAL AREA
— ON OPEN SPACE
EXISTING — ZONED FOR OTHER USER
PROPOSED — OFFICE FRONTAGE
INDUSTRIAL PARKING GROUND
HEAVY INDUSTRY EXISTING
PROPOSED ON RESIDENTIAL LAND
ON RAILWAY LAND
NOXIOUS INDUSTRY EXISTING
PROPOSED
RAILWAYS. EXISTING
PROPOSED
EXISTING INDUSTRY TO REVERT TO OPEN SPACE
PROPOSED TEMPY. OPEN SPACE ZONED FOR SHIPBUILDING YARDS
COMMERCIAL & CIVIC CENTRE
ACADEMIC AREA
SHOPPING CENTRE
HOSPITALS EXISTING
PROPOSED
OPEN SPACE
BUILT UP AREA
CEMETERIES & CREMATORIUM
RESERVOIRS
ARTIFICIAL LAKES
SCALE OF FEET.
1000
3000
5000 FEET
POULTON CUM SEACOMBE
BIRKENHEAD
UPTON
NOCTORUM
GREASBY
WOODCHURCH
ARROWE
LANDICAN
PRENTON
IRBY
THINGWALL
STORETON

Beaufort Road, are not interfered with, but supplied with more efficient and wider service roads than hitherto. It is hoped, too, that the statutory undertakers concerned will bring their dock facilities, especially the existing warehouses, more up to date.

(6) A large parking ground, together with service and amenities, has been placed just outside the dock tunnel entrance, where loaded or empty lorries can wait until they are wanted and summoned by telephone, thus clearing congestion from the docks.

(7) All the area east of Chester Street, Church Street, and Abbey Street is zoned for industry, with a proviso that buildings facing Chester Street, especially those on the proposal oval placed at the Mersey Tunnel entrance, to be office buildings.

(8) The area west of New Chester Road south of Grange Road, east of Argyle Street and north of Hinderton Road and Green Lane, is to be for light industry. Here stands that great blot on the town, the Birkenhead Corporation Gas works, which for the present will not be interfered with; but if the Gasworks, which already use a large amount of North Wales coal, we are told, could be moved out to the North Wales collieries, and high-pressure gas sent in on the grid system to Chester and Wirral — a by no means expensive venture, and one we are assured by competent authorities would be highly remunerative—the whole area occupied by the Gasworks could be turned over to the railway companies. The companies say they would be glad to have it. The rest of this area, which is now occupied by houses, i.e., that part surrounded by New Chester Road, Waterloo Place and Tunnel Road, Jackson Street, Elizabeth Place and Hind Street would, we suggest, be used for offices, well placed on a main road and with light industry behind them.

(9) The thin strip between New Chester Road and the railway, north of Green Lane, as far south as St. Paul's Road, it is suggested, shall be zoned for noxious industry.

(10) The existing shipbuilding and repair yards are given slightly more elbow room, which they need very badly, especially at the entrance to Cammell Laird's opposite Green Lane. It is proposed that the Abattoir should be merged with the Lairage and its ground given to the shipbuilding yards, the Glue and Leather Works being left undisturbed.

(11) The disused grounds east of New Chester Road, south of Cammell Laird's up to Rock Ferry, are partly zoned for immediate industrial development. Those lands adjacent to the river are to be temporarily an open space, a riverside walk, but reserved for extension of the shipbuilding yards and industry when the need arises.

(12) The area south of St. Paul's Road, east of New Chester Road and north of Bedford Road, is zoned for light industry.

(13) The brickworks near Prenton Dell Road, east of the L.N.E.R., are to be left for brick-making industry, but when this has become redundant, which will be in not more than 50 years time, an artificial lake surrounded by a park should be laid out on the site.

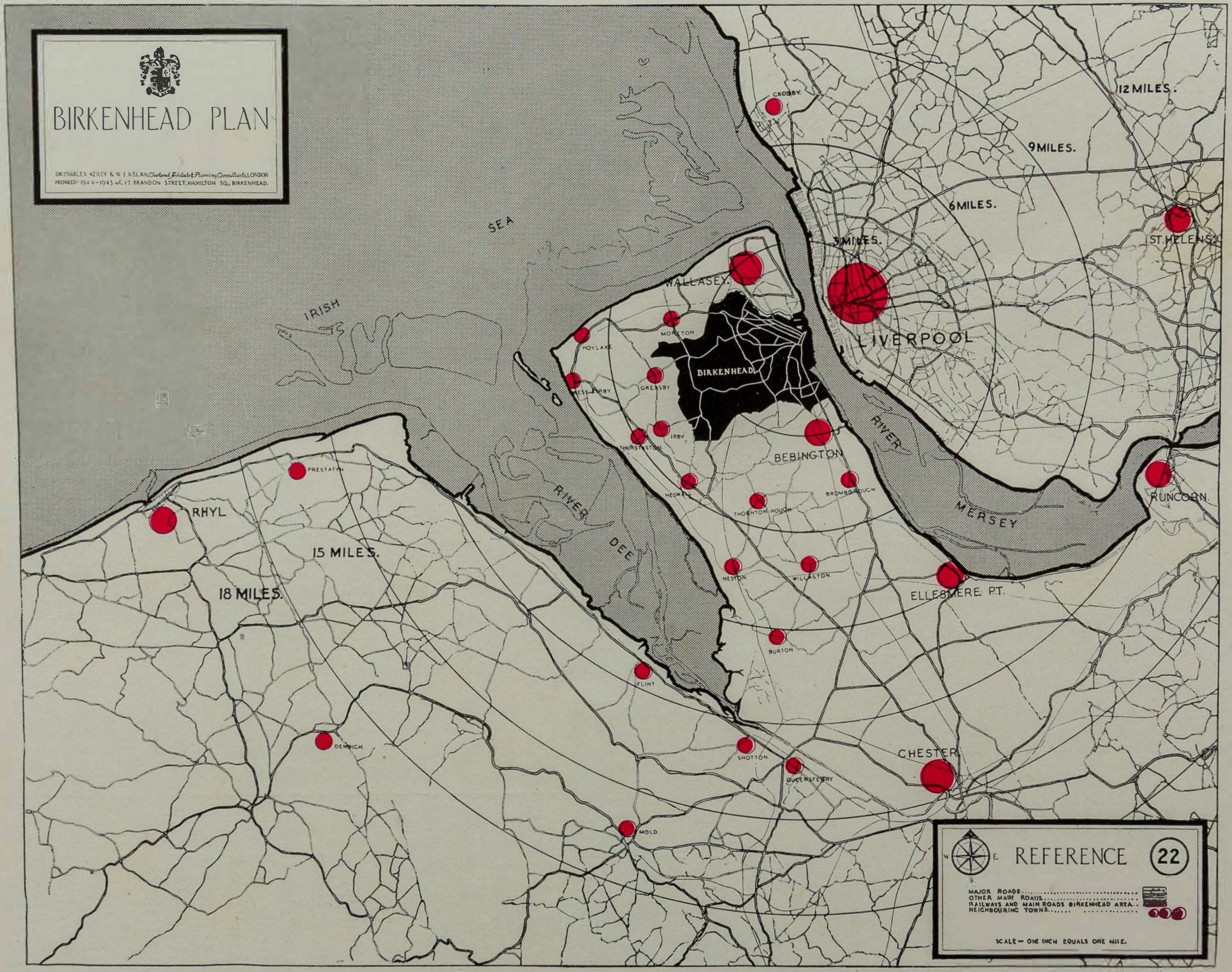
Multi-Floor Workshops

In view of the necessity of attracting light industries to the borough we suggest that a lead be given, by starting at once on building multi-storey flatted workshops in part of the areas zoned for new industry. These workshops, of economical standard construction, would appeal to the numerous heads of small industries who, because of the limited scope of their businesses, cannot afford more than the rental of a small part of a factory. Designed on a unit principle, with carefully planned access for goods and employees, and with canteens for the latter, such buildings will encourage small industrialists to commence work in the town and give them easy opportunity to expand as their business prospers.

Substantial overhead economies in services, resulting from concentration and standardisation, will be an added inducement. As an experiment it is suggested that one of these two-storey or higher workshops be erected in the new industrial belt north of Price Street. This proposal might profitably be a share of a larger scheme to develop part of the industrial area as a trading estate in the usual way, i.e., by planning standard factories in a co-ordinated scheme before they are actually required.

Main Conclusions

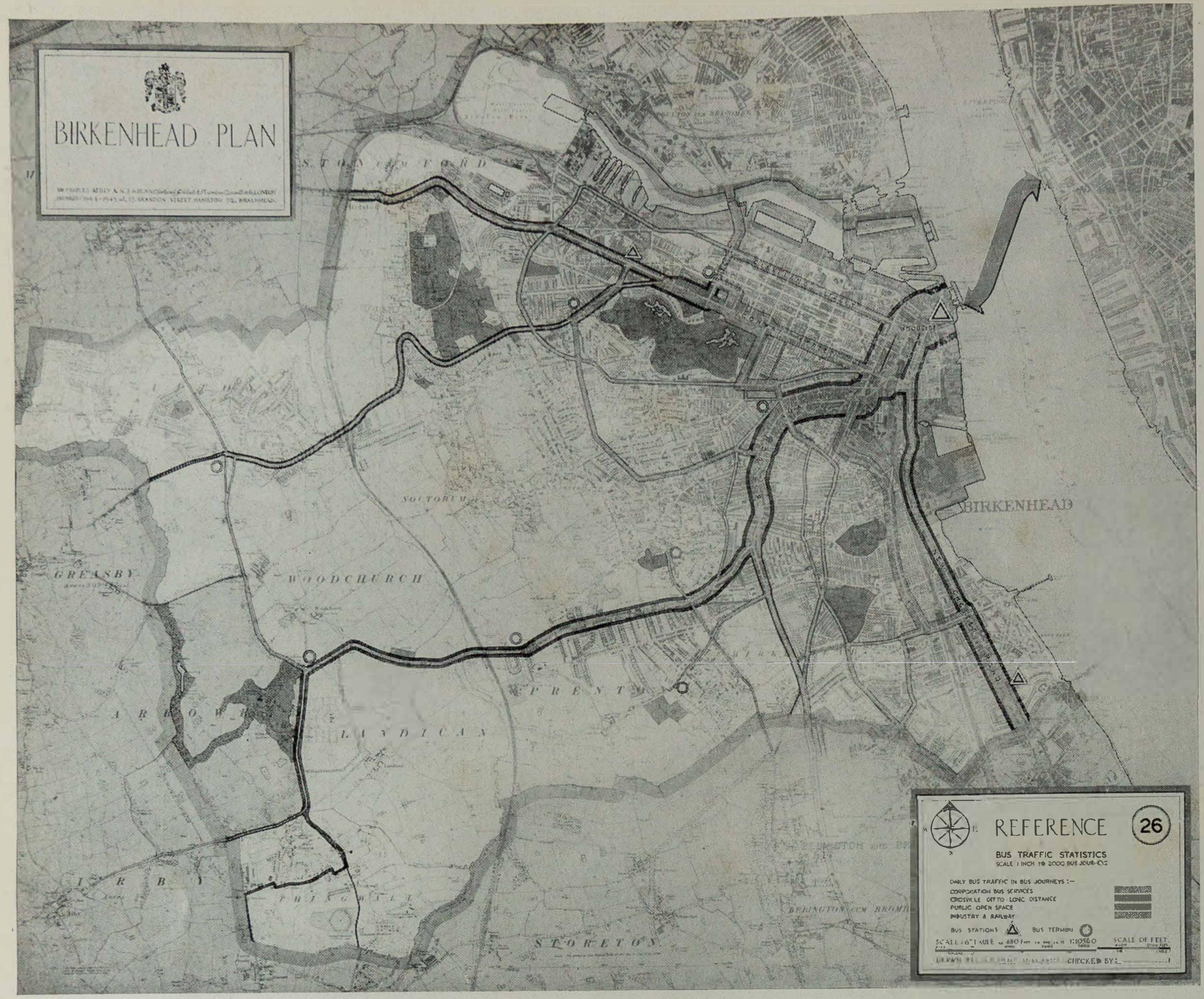
Birkenhead needs greater security of industrial tenure for its male workers, either by eliminating the boom-slump character of its two staple industries, shipbuilding and repairing, or by introducing new industries of a heavy character requiring both skilled and unskilled workers. The other need is the introduction of light industry to provide a greater variety of occupations, together with a greater volume of employment for female workers to ensure a more balanced local economy.



BIRKENHEAD OWES ITS EXISTENCE to its connections with places outside itself.

It is (a) an element of a great seaport (b) a manufacturing centre (c) a dormitory town (d) a corridor linking Wirral with Liverpool and Lancashire (e) in some respects a regional centre for Wirral.

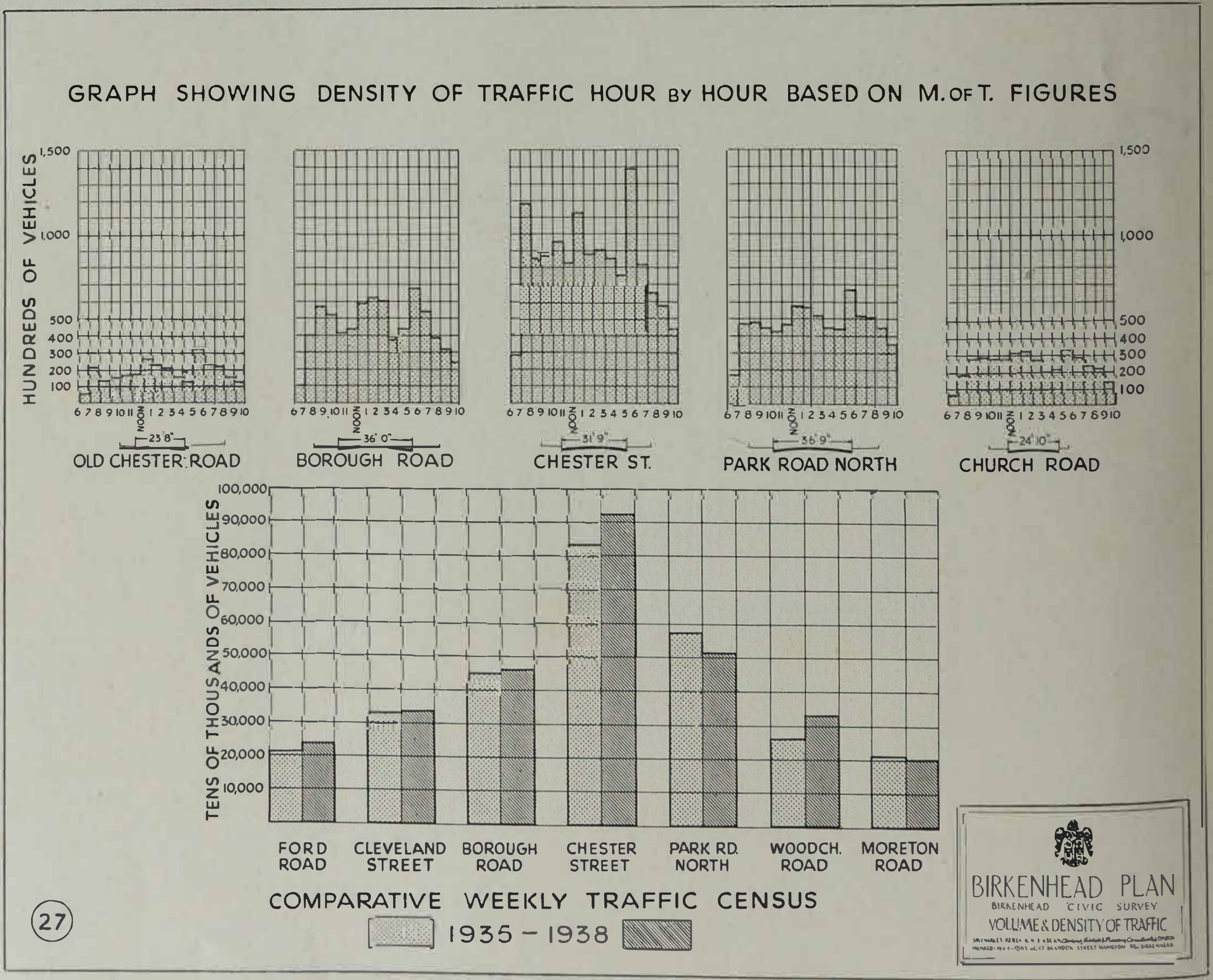
The routes to Wirral, to Lancashire, to Industrial Deeside and the Midlands are Birkenhead's life lines, and these must be maintained.



GREAT STREAMS OF BUS TRAFFIC now converge on Woodside from New Chester Road, Borough Road and Conway Street. The centre around Hamilton Square is particularly congested.

THE HEAVIEST INDUSTRIAL TRAFFIC of the town comes and goes via Chester Street and the New Chester Road. The volume of the traffic along this important route, like that of almost every road in the Borough, was increasing before the war, and will almost certainly increase greatly in future.

Note the peak traffic hour — 5 p.m. to 6 p.m.



Section Four

COMMUNICATIONS

THE NEED for efficient transport is specially inherent in Birkenhead's economy and necessary to the performance of its functions as (*a*) a corridor town, (*b*) a constituent element in a great port, and (*c*) a manufacturing centre. All these functions involve the receiving and despatching of goods and persons to near and distant places.

Recent trends have confirmed the original initial advantages of Woodside as a terminus, but today the strain upon Woodside is very great inasmuch as it is now the focus of heavy and increasing traffic of road, tunnel and railway. This growing centralisation is evidenced by the disappearance during the 19th century of three rival neighbouring ferries, and by the recent extinction (1939) of Rock Ferry.

The greater use of Birkenhead Docks in war-time and the need to disperse goods in all directions from the port as quickly as possible have resulted in the provision of improved railway facilities, and more are promised. This is a war-time gain the benefit of which will be felt in peace-time.

Industrialists, the Corporation and the Docks and Harbour Board are united in demanding the abolition of goods tolls and the opening of the Mersey Tunnel to more grades of traffic. Technical objections have been urged and the fear expressed that the increased traffic would create great confusion and increase congestion. The advocates of a free goods tunnel counter with the arguments that tolls are an unfair penalty and an extra cost on Birkenhead's industry. It is hoped for the good of the town a goods-free tunnel will soon come about.

Apart from the suggestions of our Plan, more convenient access to the Birkenhead Docks could be achieved by replacing the present cobbled roads with more modern surfaces and by providing wider quay margins. Another traffic problem is the difficulty of cross transit from Birkenhead to Wallasey; the three swing bridges cause much congestion. Great engineering difficulties are likely to be encountered in their replacement or improvement, but nevertheless we make a counter suggestion.

CLASSES OF ROAD

1. *Arterial Roads* are those roads in town or country with very restricted side access and no riparian frontages, which cater for long-distance through traffic which is generally—not necessarily—fast and heavy.
2. *Sub-Arterial Roads.* Main traffic roads in built-up areas which link the arterial roads with the local system of minor roads. To these, side access is restricted to a lesser degree. Frontages allowed, but with service road if possible.
3. *Service Loop Roads and Major Local Roads.* These distribute and drain traffic between (1) and (2) and the local road system serving the different areas. Frontages and access are here allowed. This type includes all main roads not included in (1) and (2).
4. *Local Roads.* These are the service roads of the town, i.e., they serve industry, business, shopping and residential areas.

Before considering individual roads, it should be remembered that the roads of Birkenhead carry a great deal of through traffic going to places outside the Borough, especially to Chester and North Wales. That this has always been the case is shown by the number of roads radiating from Woodside. That it had greatly increased in the years before the war with the advent of the motor car is shown by the traffic survey. That it will still further be increased with the cheap cars promised after the war is also a certainty. With the possibility of the Mersey Tunnel tolls being removed on goods traffic, the traffic from both Tunnel entrances to the new industrial areas just described is something that has had to be very carefully considered.

ARTERIAL ROADS

Price Street and the Mersey Tunnel

The two chief proposed alterations to the internal road structure are (1) a short but very important length of new road connecting the New Chester Road with Price Street, and (2) the turning of the latter into a main arterial road serving the new industrial area as well as taking the traffic from the Tunnel to Hoylake and West Kirby and to the Dee Barrage Road if that eventuates. At the Tunnel entrance it will be seen on the plan a large oval *place* has been formed, and that instead of twelve roads at different angles entering this space to muddle the drivers, only four main roads run into it placed fair symmetrically. They are Chester Street, New Chester Road, Borough Road and the new road passing under Argyle Street to Price Street which for the moment we are calling the Argyle Street By-pass. This road by an easy gradient quickly reaches the side of the railway cutting and the widened Price Street at a roundabout at the junction of Lord Street. By means of this by-pass, heavy traffic coming from Chester and North Wales can reach the docks and the new industrial areas without passing through Hamilton Square or crossing any of the main streets. Indeed, by its means a new through highway is made from north to south of the town. This short by-pass should not be a very expensive construction and might well receive a subsidy from the Ministry of Transport as a national highway improvement.

Price Street

With the widening of Price Street and making it into a park-way so that the industrial area is cut off by grass and trees from the residential area, Conway Street becomes a local road freed from through traffic and no longer a danger to children crossing from the residential area to school or to the Park (see Maps 47 (page 74) and 48 (page 58). This widened Price Street will also receive in its central strip between its two roadways the traffic from the proposed tunnel under the Docks (to which the Mersey Docks and Harbour Board see no objection) connecting Birkenhead with Wallasey. It will continue by a viaduct over the railway lines as a Bidston by-pass, relieving Bidston Village from traffic, until it meets the new Fender Valley Road.

New Fender Valley Road

This is an alternative road designed to relieve the New Chester Road of some of its traffic. It reaches that road at Ledsham. Traffic going from Chester or North Wales to the western Birkenhead and Wallasey Docks and to the new industrial area will therefore have this alternative and avoid the town.

New Chester Road

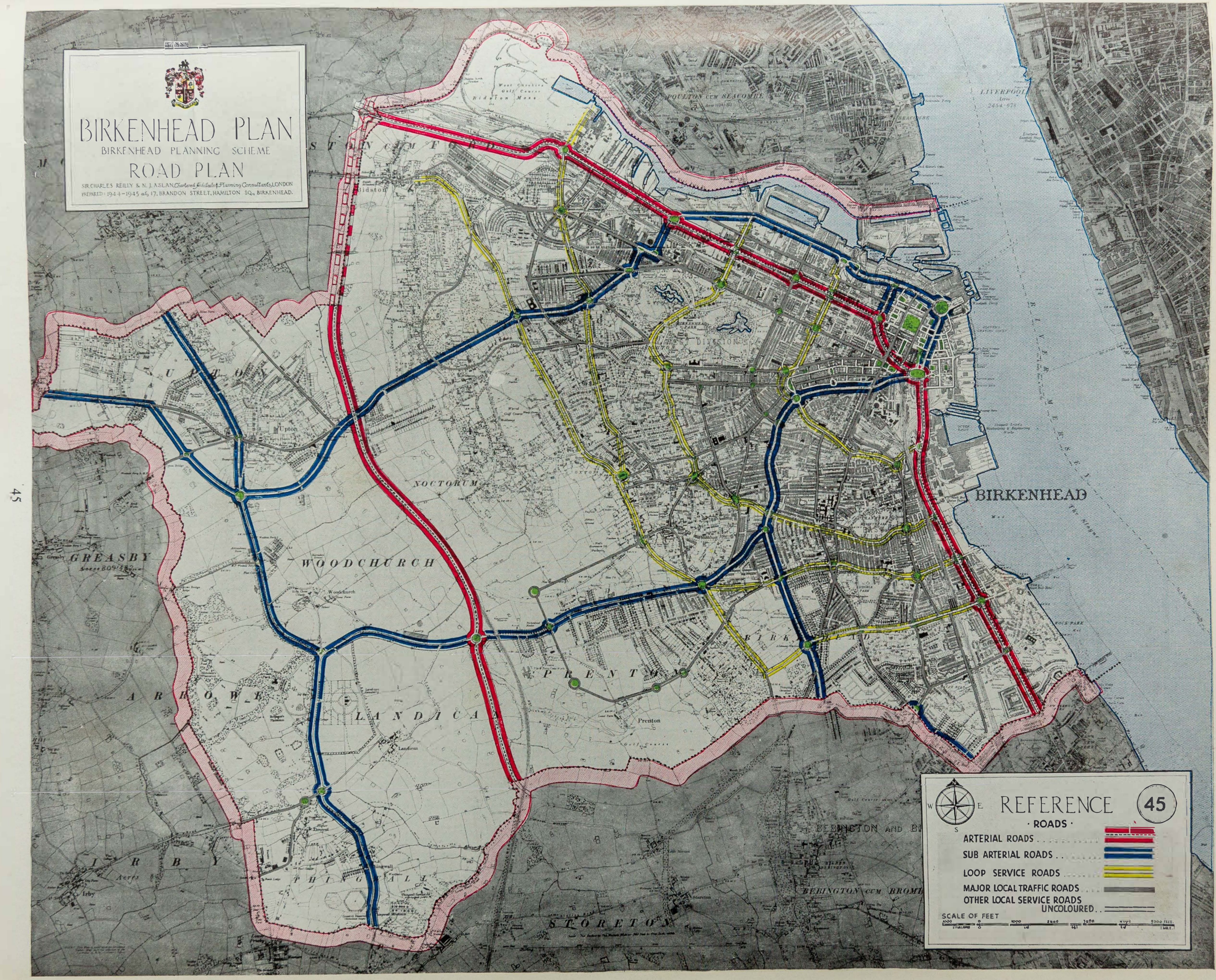
This must always be one of the most heavily trafficked roads in the area and should be widened to two 30ft. carriageways, with the side roads blocked off, except where roundabouts are provided. In August 1938 it carried 25,500 of tons per sixteen hours a day, and with the Mersey Tunnel at most times only working at a fraction of its capacity.

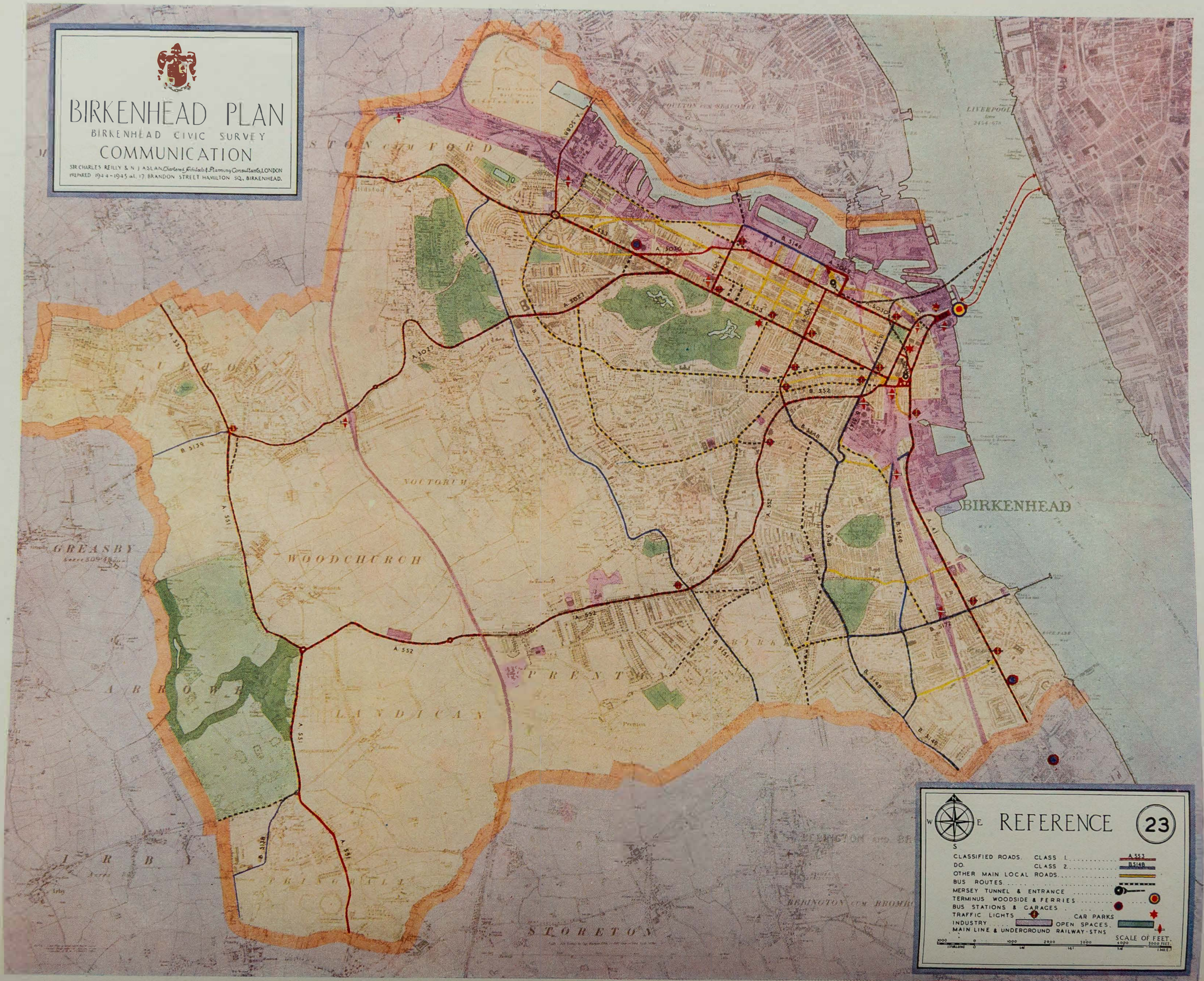
Wallasey Dock Traffic

The roundabout at Wallasey Bridge Road will be at about the same level as the bridge over the Mersey Railway 150 yards further south. Here Wallasey dock traffic will fork left while the west dock traffic will go eastwards to Beaufort Road and Corporation Road.

Wallasey Tunnel

The proposed tunnel under the Docks surfacing at Price Street about its junction with Vittoria Street, and arriving at Wallasey in the Poulton-cum-Seacombe area


BIRKENHEAD PLAN
BIRKENHEAD PLANNING SCHEME
ROAD PLAN
SIR CHARLES REILLY & N. J. ASLAN Chartered Architects & Planning Consultants, LONDON
PREPARED 1944–1945 at 17, BRANDON STREET, HAMILTON SQ., BIRKENHEAD.
REFERENCE
45
ROADS
ARTERIAL ROADS
SUB ARTERIAL ROADS
LOOP SERVICE ROADS
MAJOR LOCAL TRAFFIC ROADS
OTHER LOCAL SERVICE ROADS UNCOLOURED
SCALE OF FEET
W
E
S
RIVER MERSEY
LIVERPOOL
BIRKENHEAD
POULTON CUM SEACOMBE
NOCTORUM
WOODCHURCH
UPTON
LANDICAN
PRENTON
GREASBY
ARROWE
IRBY
THINGWALL
STORETON
BEBINGTON AND BROMBOROUGH
BEBINGTON CUM BROMBOROUGH


BIRKENHEAD PLAN
BIRKENHEAD CIVIC SURVEY
COMMUNICATION
SIR CHARLES REILLY & N J ASLAN, Chartered Architects & Planning Consultants, LONDON
PREPARED 1944-1945 at 17 BRANDON STREET HAMILTON SQ., BIRKENHEAD.
REFERENCE
23
N
W
E
S
CLASSIFIED ROADS. CLASS 1.
A 553
DO. CLASS 2.
B5148
OTHER MAIN LOCAL ROADS
BUS ROUTES
MERSEY TUNNEL & ENTRANCE
TERMINUS WOODSIDE & FERRIES
BUS STATIONS & GARAGES
TRAFFIC LIGHTS
CAR PARKS
INDUSTRY
OPEN SPACES.
MAIN LINE & UNDERGROUND RAILWAY·STNS
SCALE OF FEET.
1000
0
1000
2000
3000
4000
5000 FEET.
1 MILE.
BIRKENHEAD
LIVERPOOL
RIVER MERSEY
WOODCHURCH
NOCTORUM
PRENTON
LANDICAN
ARROWE
UPTON
GREASBY
IRBY
STORETON
BEBINGTON
A 553
A 5030
A 5027
A 552
A 551
A 41
B 5146
B 5148
B 5140
B 5151
B 5139

would be an improvement which any traveller between the two boroughs would appreciate. If in the future these two boroughs and others coalesced to form Wirral City, the importance of such a connection will be all the greater.

To sum up: by these main internal improvements the heavy traffic of the New Chester Road and the still heavier traffic to come will be shared by the new Fender Valley Road, and these two roads will have as a link the two new by-passes, the Argyle Street one and the Price Street-Bidston one.

SUB-ARTERIAL ROADS

Borough Road

We believe that it would be to the advantage of Birkenhead to leave the function of Borough Road as that of a major local road rather than to turn it into an arterial one, aiming at connections with Wirral. We do not believe with the improvements to New Chester Road and with the creation of the Fender Valley Road, Birkenhead will require another major arterial road to carry its through traffic. Borough Road, too, passes through several residential areas which makes it unsuited to the latter purpose. The pre-war traffic along the town section of it was mainly Wirral traffic to Singleton Avenue and Woodchurch. Only a small proportion of vehicles went on to Bebington. Up to Singleton Avenue we suggest that this part of the road will be used in addition for local private cars and minor industrial traffic, and that it should be therefore widened to 85ft. with two carriageways. After Singleton Avenue 60ft. with a single 30ft. carriageway to connect with the Lever Causeway would be sufficient. Roundabouts are suggested both at the junction with Whetstone Lane and with Singleton Avenue.

Birkenhead-Upton-Greasby and West Kirby Road

The Birkenhead and West Kirby Road starts at the junction of Price Street and Corporation Road, going southward from the existing Patten Street bridge over the Mersey Railway, connecting east of the gasometer with Laird Street and on to Park Road North and the Thermopylae Pass, thus avoiding the dangerously steep hairpin bend and the hidden junction with Vyner Road and Eleanor Road. At Upton Bridge the route leaves the old Upton Road and follows the proposed Upton By-pass, then joins Arrowe Park Road at a roundabout and travelling further west it forks to Greasby and West Kirby, and right to Saughall Massie.

Woodchurch, Thingwall and Heswall Road

The Woodchurch Road starts at Borough Road at the junction of Singleton Avenue and on to Woodchurch Road across a roundabout at the new Fender Valley Road, proceeding further west to a roundabout at the Arrowe Park Hotel. From here it forks south to Thingwall Corner where a new roundabout is created. At this point the road forks south-east and south-west; the south-east arm follows the newly widened road up to the borough boundary and leads ultimately to Chester, while the south-west arm leads to Lower Pensby Village and on to Heswall. From Thingwall Corner a second road leads to Irby, Thurstaston and eventually West Kirby.

LOOP SERVICE ROADS

Birkenhead being in a sense a terminal town, with its through traffic arriving and departing at practically the same point on its circumference, the ordinary device of a series of ring roads to drain off the traffic from its centre which does not need to go there, is inapplicable. The through traffic from Woodside and the Tunnel entrances to places outside the borough must pass through the town. That is why care has been taken to improve certain radial roads. There is, however, in all towns a certain amount of local traffic from one part to another, which it is advisable to keep away from the central crowded parts. A series, therefore, of local loop roads has been devised as follows. The maps (Nos. 45, 46 and 47) (pages 45, 49 and 74) therefore show the following three loops with their connections.

Loop Road No. 1

Loop Road No. 1 starts at the roundabout at the dock entrance to the Tunnel, goes south across Price Street, through Watson Street, crosses Conway Street, Exmouth Street and Claughton Road, slightly by-passes Charing Cross to the west, then crosses Borough Road, passing along Whetstone Lane to the junction of Church Road and Holt Road, then down Holt Hill to a roundabout where Holt Hill, Hinderton Road, Old Chester Road and Green Lane all meet. From this point it proceeds to the New Chester Road by Green Lane.

In some ways a better but slightly more expensive alternative to this southern arm of the loop would be to fork eastward at a point just east of Birkenhead Institute in Whetstone Lane and follow on practically level ground in the direction of the junction of Argyle Street South and Pearson Road. The level of this junction enables the fork to pass under it to join Hinderton Road at a halfway point. This route avoids the climb up the hill to its crest east of Holt Hill Convent. It is shown by a dotted line on Map No. 47 (page 74).

Loop Road No. 2

Loop Road No. 2 starts from the Duke Street Bridge, crosses Cleveland Street and Price Street, proceeds along Duke Street and crosses Park Road North. It then follows the line of Ashville Road. At the corner of Park Road West it crosses to the end of this road and then crosses Park Road South to join an improved and widened Palm Grove and to traverse the western side of what we have called the Academic Centre. From here it proceeds southward to Palm Hill, Oxton, and Claughton Firs, across the Woodchurch Road, then southward to North Road and slightly southward again to the junction of Elm Road and North Road, along Walker Street, Downham Road, passing south of Mersey Park, across the Old Chester Road and through Union Street to the New Chester Road.

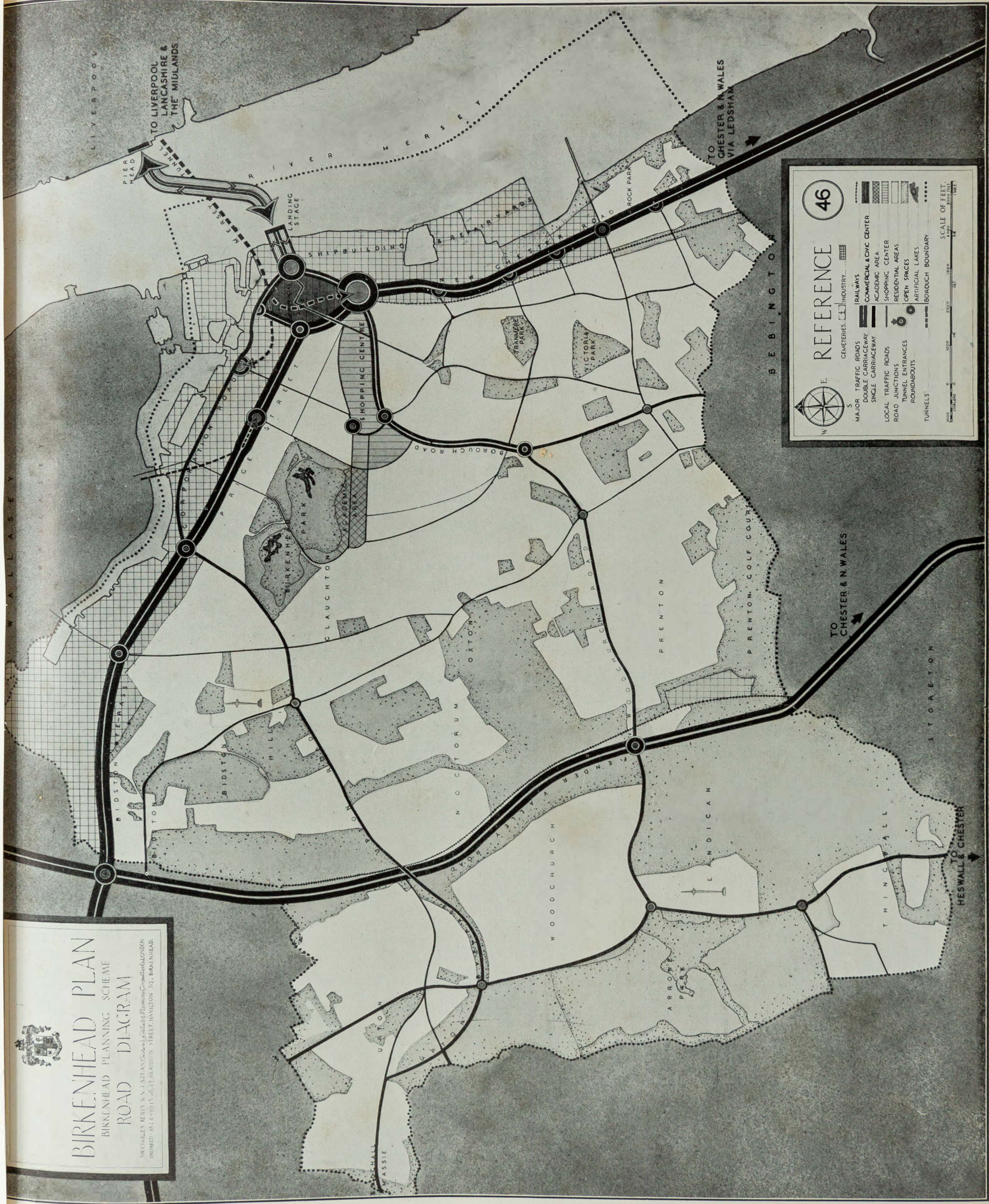
Loop No. 3

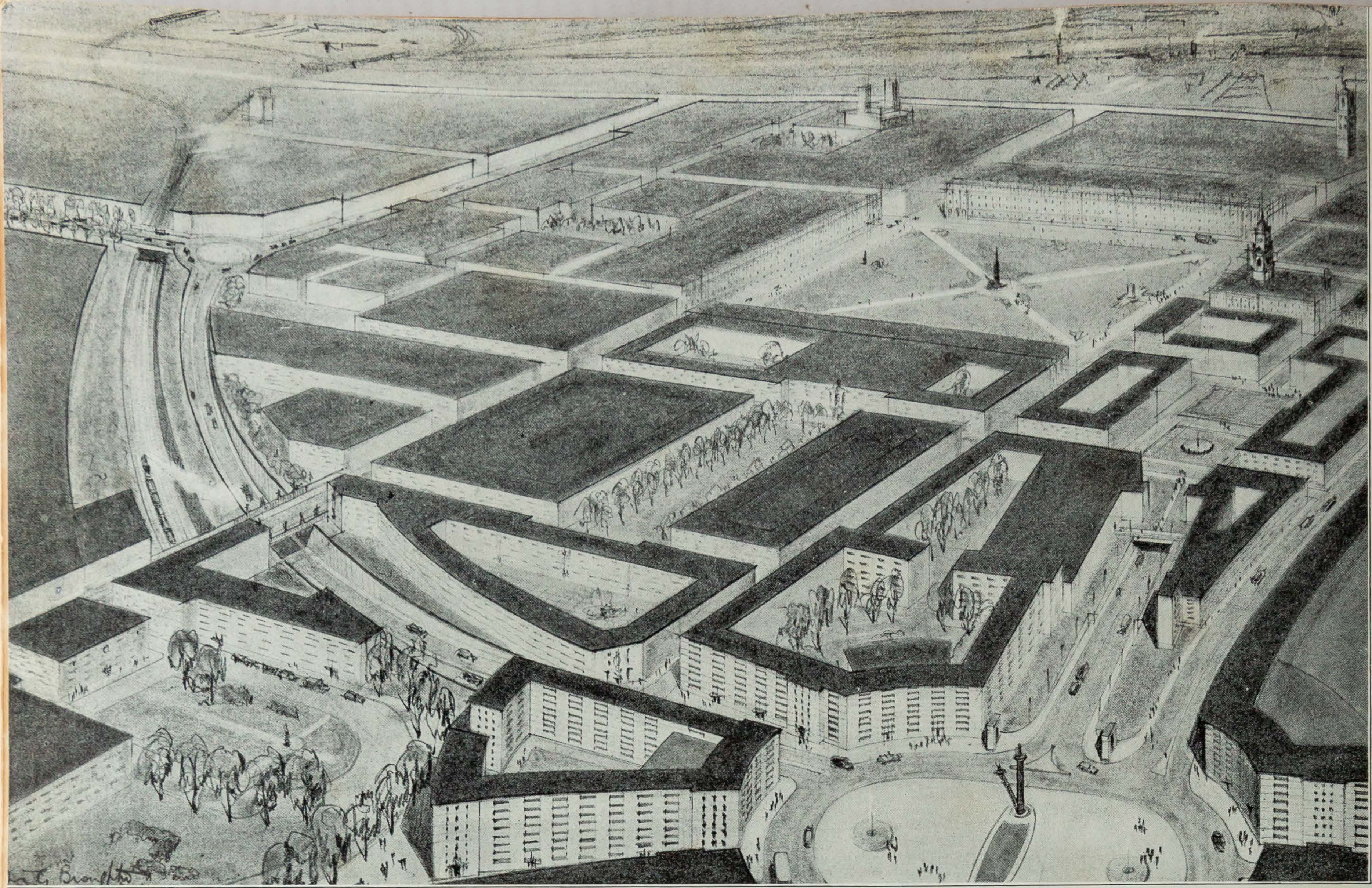
Loop No. 3 starts at Wallasey Bridge Road, crosses the junction of Beaufort Road and the Bidston By-pass to St. James's Church, passes through an improved Sumner Road and the northern part of Alderley Avenue, crosses Shrewsbury Road North and passes on the junction of Wexford Road with Shrewsbury Road, where it runs on to St. Saviour's Church. Another branch of this loop starts at Hoylake Road and joins Boundary Road and on to the St. Saviour's Church roundabout. From here it follows the route of Talbot Road till at Mill Hill it takes a new line west of Arno Hill, there swerving south-east towards the junction of Woodchurch Road and Storeton Road. From here this loop forks eastward to Woodchurch Lane, Prenton Road East, Well Lane and St. Paul's Road to the New Chester Road and westward through Storeton Road, Mount Road, Bedford Drive, Bedford Avenue, to the New Chester Road and across it to Rock Ferry.

MAJOR LOCAL ROADS and Special Traffic Features.

1. Conway Street

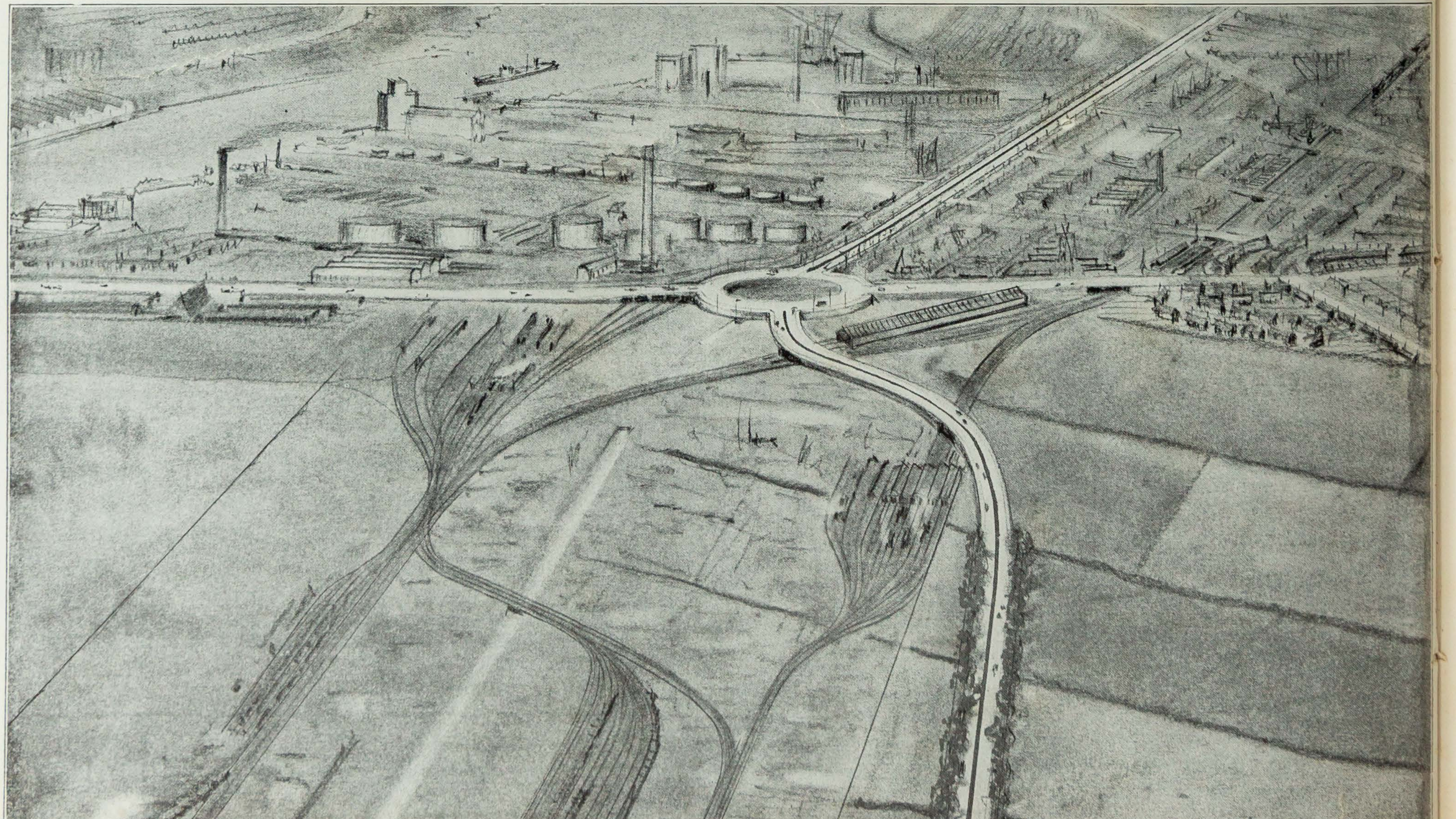
Conway Street, though no longer a through artery, will be preserved at its existing width and given two circuses both to help in creating a shopping centre for the Neighbourhood Unit in which it lies (see Section 5 on Neighbourhood Units) and to prevent the traffic speeding with so long and straight a street ahead. In addition, a diamond-shaped *place* is shown at the entrance to the Park which will regulate the cross traffic from Vittoria Street and act as a more suitable approach to the handsome Park Entrance. The approach to Conway Street, too, from the Tunnel Entrance is purposely made less direct than that to Price Street in order to prevent fast through traffic from choosing it. With a large residential area abutting on it on both sides, and with children crossing it at many points to reach their schools and the Park, these precautions are, in our opinion, strictly necessary. From an æsthetic point of view the various breaks in the long monotonous lines of the street would be a great improvement. We suggest further that it be tree-lined throughout. Having seen how particularly vivid the


BIRKENHEAD PLAN
BIRKENHEAD PLANNING SCHEME
ROAD DIAGRAM
SIR CHARLES REILLY
HAMILTON SQ., BIRKENHEAD.
REFERENCE
46
CEMETERIES
INDUSTRY
MAJOR TRAFFIC ROADS
DOUBLE CARRIACEWAY
SINGLE CARRIACEWAY
LOCAL TRAFFIC ROADS
ROAD JUNCTIONS
TUNNEL ENTRANCES
ROUNDABOUTS
TUNNELS
RAILWAYS
COMMERCIAL & CIVIC CENTER
ACADEMIC AREA
SHOPPING CENTER
RESIDENTIAL AREAS
OPEN SPACES
ARTIFICIAL LAKES
BOROUGH BOUNDARY
SCALE OF FEET.
W
E
S
LIVERPOOL
TO LIVERPOOL LANCASHIRE & THE MIDLANDS
PIER HEAD
TUNNEL
LANDING STAGE
RIVER MERSEY
SHIPBUILDING & REPAIR YARDS
NEW CHESTER ROAD
ROCK PARK
TO CHESTER & N. WALES VIA LEDSHAM
BEBINGTON
TRANMERE PARK
VICTORIA PARK
SHOPPING CENTRE
BOROUGH ROAD
ACADEMIC AREA
BIRKENHEAD PARK
PRICE STREET
CORPORATION ROAD
WALLASEY
CLAUGHTON
OXTON
PRENTON
PRENTON GOLF COURSE
TO CHESTER & N. WALES
STORETON
WOODCHURCH ROAD
FENDER VALLEY ROAD
NOCTORUM
BIDSTON HILL
BIDSTON
BIDSTON BYE-PASS
LANDICAN
THINGWALL
TO HESWALL & CHESTER
WOODCHURCH
ARROWE PARK
UPTON
SAUGHALL MASSIE



PROPOSED ARGYLE STREET BY-PASS. Panoramic view of the Commercial and Civic Centre showing Argyle Street By-Pass (left), Hamilton Square (centre) and the Mersey Tunnel entrance (foreground).

PROPOSED BIDSTON BY-PASS showing junction with Wallasey Bridge Roundabout and Beaufort Road.



green of the spring leaves is in Birkenhead, we suggest a great tree-planting scheme should be started in all roads wide enough which are without trees at present, as scheduled in Appendix No. 19. A note by Mr. W. M. Campbell, the Curator at Kew Gardens, on suitable trees for Birkenhead and on methods of planting them will be found in the same Appendix to this Report. Mr. Campbell lived for many years in the North West and has had great experience in the matter.

2. Main Entrance to the Mersey Tunnel

When the Tunnel entrance was planned it seems little thought was given to the various traffic problems. The entrance to this great tunnel, one of the biggest in the world was just laid out as one of the dozen other entrances and exits to this square. As mentioned above only four means of access have been retained to this *place*, with a long-distance 'bus station on the east side. From this station an open vista has been provided, westward to the Grange Road Shopping Centre, while to the east the Priory has been brought to the forefront by also leaving a vista from the Square to St. Mary's Church. Further west, in the Haymarket area, there exists today another but even more misleading open space, with ten entrances and exits and no guide whatsoever to the traffic. This state of affairs has been remedied on our plans by giving the open space a definite shape, and closing to through traffic the unnecessary openings. The same treatment has been given to the area north of Central Station. The Clifton Crescent exit to Borough Road is closed, but the Crescent runs on to St. John's Church in Grange Road and becomes a service road to the back of the shops. The Hind Street entrance is also closed. Only a simple crossing is left of Argyle Street, and on account of the gradients of the contours round Central Station the solution by a roundabout was too difficult. This crossing is one of the few places on the plan where new traffic lights will have to be installed.

3. Dock Tunnel Entrance

The present Dock Entrance to the Tunnel is anything but planned. In this small and haphazardly laid-out open space no less than half a dozen street entrances and exits confuse the traffic. A roundabout is created here, with entrances and exit for the Dock service road, and a junction to Cleveland Street which serves all purposes. Freeman Street, which feeds the approach to the three bridges, has been kept as a more or less special road for this purpose.

4. Woodside

The island containing the Woodside Hotel and the other small buildings adjacent lends itself admirably for the creation of a first-class roundabout which is very badly needed here. At present the traffic comes from anywhere and goes everywhere. The junction of Hamilton Street and Bridge Street is specially bad where 'buses and cars are always brought up with a jerk to avoid crushing into other traffic coming from an unexpected direction. To add insult to injury long-distance 'buses stand at the other side of the present island, not only cutting off part of the main road through parking, but congesting the pavement with queues and impeding the pedestrians. The roundabout shown on drawings Nos. 47 and 50 (pages 74 and 73) is designed with this two-fold purpose :

Traffic Problem

(1) A solution of the traffic problem by a gyrational system is suggested. With all the traffic coming in the one direction it will be an easy matter for pedestrians to realise it and cross in safety. By blocking three of the minor roads and leaving only the three main roads to this roundabout, the traffic difficulty is further eased. It will be noticed that Hamilton Street is adjusted to come at right angles to the roundabout, while Bridge Street is closed altogether. Canning Street will then regain its former position as the main highway to Wallasey Pool (Canning Street used to be in line with Corporation Road before the Railway came into being). The 'bus station at Woodside is, it will be seen, isolated from this roundabout by an oblong island east of it, thus leaving one entrance and one exit only to the station.

New Hotel

(2) On the island itself a large hotel is suggested of twelve storeys, comparable in size to the Adelphi Hotel in Liverpool, but in a far finer position with a grand view of the river and its shipping. It is raised on a platform partly to overcome the gradient, but mainly to protect it from the noise of the 'buses which would be shot upwards and away from it by the high retaining wall. An expedient of this kind has been adopted with great success at the Unilever Building on the Thames Embankment, where the traffic is still heavier.

5. *Lord Street*

The junction of Price Street and the Argyle Street By-pass is connected to New Canning Street (Docks service road) by Lord Street. This is widened to a double carriageway each 22ft. wide, with a centre reservation of 25ft. This will also connect Cleveland Street (Industrial service road) to both Argyle Street By-pass and the Docks.

6. *Charing Cross and the proposed Charing Cross By-pass*

Charing Cross has long been overloaded by traffic, as can be seen from the traffic chart and statistics, as well as by the increase of accidents there. This spot, which is a commercial centre, should be protected from through traffic by giving a better alternative to Atherton Street. A new crescent road connecting the two, and roundabouts, one at the junction of Claughton Road and Atherton Street, and the other at the junction of Borough Road and Whetstone Lane, are proposed. This crescent would have two carriage-ways of 22ft. each, with a centre reservation of 25ft. To guide the traffic to this new by-pass, Atherton Street is made a one-way road in a northerly direction only. Further west, at the south-east entrance to the Park, a circus is created, purely for its amenity value, together with a double carriageway or boulevard enclosing the 'Academic Area' on the east, south and west, where it joins the service loop road No. 2. A large crescent extension of the eastern part of this boulevard has been continued from this corner of the Park to the Library, which, in addition to its amenity value, connects the Library with the Academic Centre.

7. *Thingwall Corner*

Thingwall Corner is a dangerous and awkward corner where four main roads meet in pairs, at approximately 200 yards distance from one another. Two roundabouts have been planned, which will not only help the traffic concentrated here, but add to the amenity of the place by providing a new and important entrance to Arrowe Park. From this point traffic from Birkenhead via Woodchurch, or from Wallasey via Moreton, goes south-west to Heswall and west to Irby, West Kirby or Thurstaston.

8. *Woodchurch Road, the New Fender Valley Road Roundabout*

The junction of the Woodchurch Road and the new Fender Valley Road is the main interchange between the mid-Wirral traffic and the Birkenhead residential traffic, and a roundabout is clearly called for. It is placed approximately 200 yards west of the L.N.E.R. railway bridge. It will be noted that the new Fender Valley Road continues from here for over two miles northward into Wallasey without a junction with any other road. It is proposed that when it approaches Upton Road it should go under it on the west side of the railway at Upton Station.

9. *St. Saviour's Church*

A roundabout has been placed here, with the church in the centre of it, which adds further land to the churchyard, and at the same time regulates the traffic on road No. 3.

10. *Proposed Roundabout at the Junction of Corporation Road and Price Street*

One or two minor roads have been closed including the west arm of Corporation Road, while a new access to Upton Road is proposed running from Patten Street bridge, east of the gasometer, thus giving access for the through traffic from Price Street and the Mersey Tunnel to Upton and in that direction.

11. *Beaufort Road*

The docks have always had their own service road in Canning Street, Bridge Street and Corporation Road, but along Beaufort Road there exists no service road at all except this road, which is now zoned for through traffic; therefore we propose a service road on the dockside, of 22ft. carriageway, which should be entered from the roundabouts at both ends of this road. This cannot materialise until some of the houses on the south side of Beaufort Road have been demolished to give the extra width required. It is regrettable that the Corporation should have built these houses during the last two decades knowing full well the highly industrialised value of this area.

12. Well Lane Junction

The diversion of Well Lane to enter the proposed roundabout at the junction of Grove Road, St. Paul's Road and Old Chester Road. The proposed diversion of Well Lane provides a better approach to St. Paul's Road and New Chester Road. This roundabout provides a solution to the present traffic congestion which occurs at this point and will obviate the necessity of police control.

13. North Road, Derby Road Area

No. 13 proposal includes the cutting of a new length of roadway through the existing sub-standard property adjoining Walker Street to connect North Road with Downham Road. This will improve traffic movement between New Chester Road and Borough Road. The second purpose includes diverting the existing Derby Road, approximately at its junction with Fountain Street, in an easterly direction through the present Municipal Hospital (which is ultimately intended to be open space) to join with Church Road opposite Elm Road. This proposal cuts off the steep gradient in Derby Road at the junction with North Road and diverts the present 'bus traffic off Greenway Road, which will now become a residential road.

14. The Connection of Well Lane with Prenton Road East

The connection between Well Lane and Prenton Road East is to be provided by a traffic roundabout between the two roads. Into the roundabout will converge the traffic of Greenway Road, Church Road and Prenton Road East. The sub-standard property forming the present triangle south of the above roundabout, into which Bebington Road and Mount Road will converge, to be ultimately an open space. The above schemes, 12 and 13, will provide a through and direct traffic route from New Chester Road via Well Lane to Borough Road, and will also compel all 'bus and heavy vehicular traffic to use Old Chester Road when proceeding in a southerly direction towards Rock Ferry and Bebington.

15. Proposed new length of Road between Borough Road and Woodchurch Road through the present Allotments

This suggested road and widening of Kingsland Road is part of the proposal for No. 2 Loop, between the easterly part of the town (New Chester Road) and the westerly side. The road will leave Borough Road opposite the junction of North Road and proceed in a westerly direction through the allotments and enter Kingsland Road near the top, finishing eventually at a proposed new traffic roundabout. A new road is proposed which is a continuance of Claughton Firs. This road enters the shopping and community centres of Oxton, forming a direct route between Woodchurch Road and the Oxton shopping centre.

16. Shopping and Community Centre, Claughton Firs

The proposed local shopping centre at Claughton Firs is suggested with the idea of supplying the Noctorum and Oxton areas. From it roads will radiate to all parts of the district. The main traffic route (still bearing in mind the easterly-westerly No. 2 loop) will be along Christchurch Road, circling the roundabout and then along Village Road. Here a new length of road is proposed, running through Oxton Hill Nursery and direct into Shrewsbury Road. From here traffic will proceed either to the westerly dock area or towards Upton.

17. Roundabout at Christ Church

The roundabout at Christ Church provides a setting to this beautiful church and landmark. The proposed new hospital will be entered at this point to which roads from all parts of the town converge.

18. Continuation of Talbot Road

The continuation of Talbot Road is proposed in a south-easterly direction to join Woodchurch Road at the junction of Storeton Road. This length of new road through the existing allotments and running along the westerly side of the Arno provides a direct link between Bidston Road and Storeton Road, and eventually with Wirral. At the junction of Ingestre Road a traffic loop is provided. A new road will proceed in a westerly direction towards the new shopping and community centre, which it is proposed to create in the Holm Park area.

19. *Walker Park*

At Walker Park it is proposed to provide two minor roundabouts, separated by a length of roadway with central verge, running along Prenton Lane and fronting the Park. The above features will form attractive entrances to the Park. To the easterly roundabout the present roads will converge and from the westerly roundabout a new road will leave running through Prenton Hall and then proceeding in a north-westerly direction to Woodchurch Road. This new road will eventually be the main traffic route for this residential area.

FERRIES

One of the most pleasant of the amenities of Birkenhead is its approach from Liverpool by the Ferry. For those who work in Liverpool but sleep in Birkenhead the daily ferry crossing can be part of the joy of living. A ride through the Tunnel is quicker for those who are in a hurry, but this is no substitute for the river crossing on a good day.

We suggest that Woodside Landing Stage be modernised and given a general brightening. Our proposal for a Casino on the Coal Yard east of Woodside Station and adjacent to the Landing Stage will attract evening passengers from Liverpool and in the day-time allow inhabitants of Birkenhead to enjoy the river.

It is also suggested that Rock Ferry should resume its function. The proposed Riverside Walk north and south of the Rock Ferry landing stage will attract passengers to that spot. It is from here that a good view is obtained of the Liverpool River Front and of the shipping in the Sloyne. (*For Ferry statistics see Appendix* No. 10.)

RAILWAYS

Birkenhead is adequately supplied with railways from both the industrial and passenger point of view. Indeed this has well manifested itself during the war years when the railways have successfully dealt with greatly augmented loads. They have not, however, formulated any programme for the future, feeling, we suppose, their present arrangements, except in the speed of the main Great Western line, are sufficient (see Appendix No. 11). We, however, strongly recommend that all their passenger stations should be modernised. For the benefit, too, of the atmosphere of the town, a very necessary point if people are to be attracted to it, all lines existing should be electrified and the present smoke from the cuttings abolished. This may seem a policy of perfection, but it should be remembered no steam train has been allowed to penetrate to Manhattan Island, New York, for the last quarter of a century, and that in a backward country like Italy electric trains now run from the North to Rome. In French Morocco electric trains connect the towns though they are many hundreds of miles apart. It would almost seem that it is only in this country that the steam train is allowed to pollute the atmosphere.

Underground (Mersey Railway)

In Birkenhead there are seven Underground Stations which are connected to Liverpool, Wallasey, Hoylake and West Kirby. These all require improvement and modernisation, especially the Hamilton Square station. For this station the Mersey Railway have already a scheme to complete a battery of six electric lifts with an 'In' and 'Out' system which will largely obviate the present congestion where one entrance often acts as both entrance and exit. If this is carried out the ornate red brick tower with its large lettering, so detrimental to the atmosphere of Hamilton Square, could be removed.

On our plan we have allotted elbow-room to the east and south of this Station (see Map No. 50 page 73). A spacious forecourt to the main entrance in Hamilton Street is possible, and a secondary entrance with Taxi and Car Park on the site of Bridge Street.

No expansion in the Underground System is contemplated in Birkenhead. Should the Parkgate-Central Station line suggested by the Merseyside Regional Scheme materialise, the congestion in Hamilton Square Station will be greatly increased unless a continuous circular loop is made in Liverpool allowing trains to run continuously without wasting time in Liverpool Central Station, where at present they have to back and change direction. We are told that if such loop is made the existing lines can comfortably serve twice the number of the peak hour passengers.

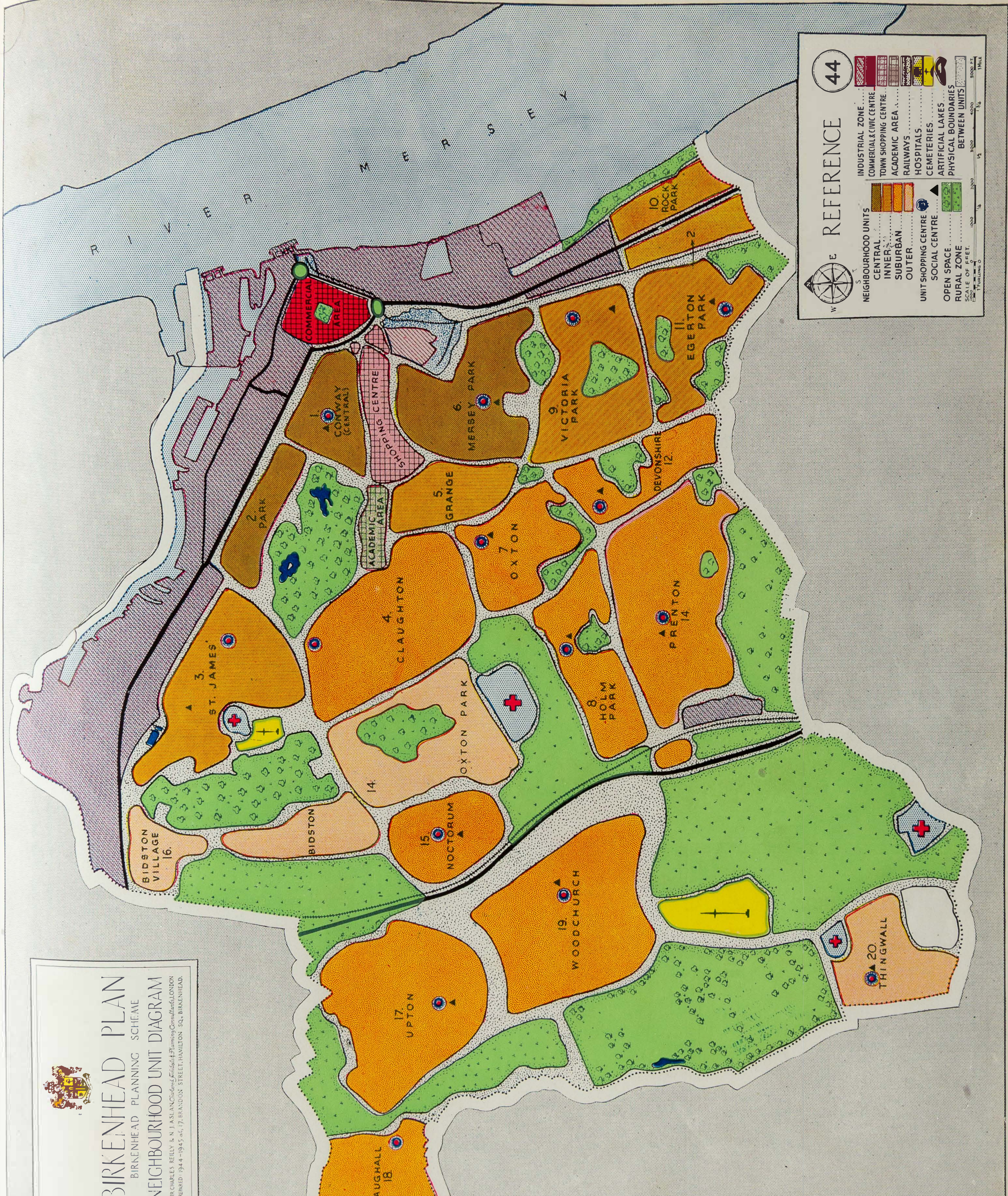
TRANSPORT POLICY

Birkenhead and region have modern and varied means of transport which are very efficient, but which sadly lack co-ordination. It is a great surprise to find how much time is wasted when one has to get from one part of the region to another. This is due to the many bodies who each run their own service, whether local or inter-regional.

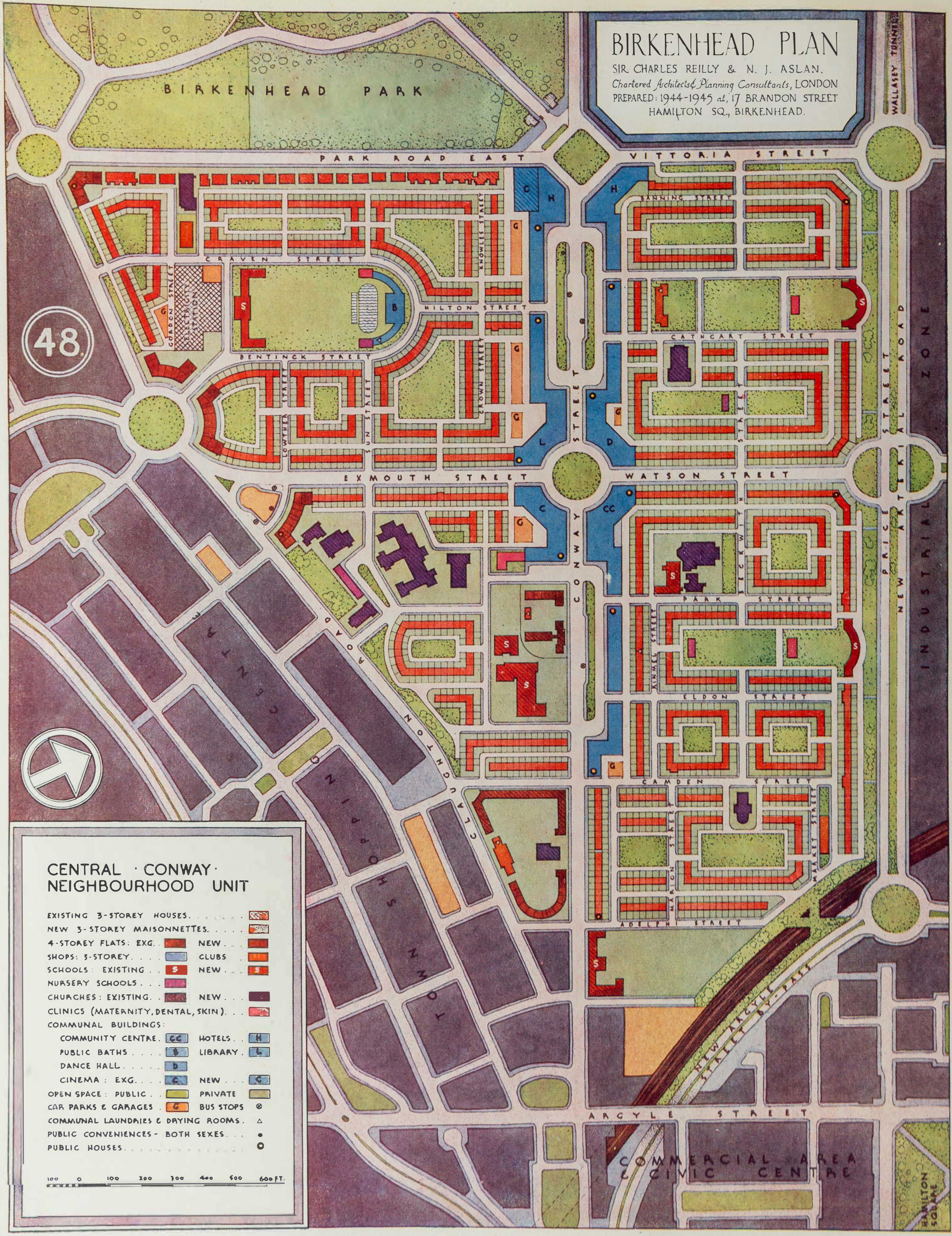
We strongly recommend that the whole region should co-operate to create a Merseyside Passenger Transport Board on the same lines as the London Transport Board.

AIR TRANSPORT

The essence of air transport is speed. An aerodrome therefore in the heart of Wirral but close to Birkenhead, the capital, is in our opinion essential for future prosperity. The nearest existing aerodrome is at Hooton. Unfortunately there is not sufficient land in Birkenhead for such a project. The nearest suitable site appears to us to be near Hoylake at Saughall Massie Camp. This could be reached through the proposed Bidston By-pass and Price Street in a matter of 10 to 15 minutes. In this case, too, we recommend that a joint Wirral Airport Committee from the local Authorities be set up.



BIRKENHEAD PLAN
BIRKENHEAD PLANNING SCHEME
NEIGHBOURHOOD UNIT DIAGRAM
SIR CHARLES REILLY & N. J. ASLAN Chartered Architects & Planning Consultants, LONDON
PREPARED 1944–1945 at, 17, BRANDON STREET, HAMILTON SQ., BIRKENHEAD.


BIRKENHEAD PLAN
SIR CHARLES REILLY & N. J. ASLAN.
Chartered Architects & Planning Consultants, LONDON
PREPARED: 1944-1945 at 17 BRANDON STREET
HAMILTON SQ., BIRKENHEAD.
BIRKENHEAD PARK
PARK ROAD EAST
VITTORIA STREET
WALLASEY TUNNEL
BANNING STREET
CRAVEN STREET
GORDON STREET
ELECTRICITY STATION
HILTON STREET
KNOWLES STREET
BENTINCK STREET
LOWTHER STREET
SUN STREET
CROWN STREET
CATHCART STREET
CONWAY STREET
EXMOUTH STREET
WATSON STREET
BECKWITH STREET
PARK STREET
KINNELL STREET
ELDON STREET
CAMDEN STREET
MARION STREET
MARKET STREET
ADELPHI STREET
PRICE STREET
NEW ARTERIAL ROAD
INDUSTRIAL ZONE
CLAUGHTON ROAD
TOWN SHOPPING CENTRE
NEW ARGYLE STREET BY-PASS
ARGYLE STREET
COMMERCIAL AREA & CIVIC CENTRE
HAMILTON SQUARE
48.
H
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CC
B
b
G
S
CENTRAL · CONWAY · NEIGHBOURHOOD UNIT
EXISTING 3-STOREY HOUSES
NEW 3-STOREY MAISONNETTES
4-STOREY FLATS: EXG.
NEW
SHOPS: 3-STOREY
CLUBS
SCHOOLS: EXISTING
NEW
NURSERY SCHOOLS
CHURCHES: EXISTING
NEW
CLINICS (MATERNITY, DENTAL, SKIN)
COMMUNAL BUILDINGS:
COMMUNITY CENTRE
HOTELS
PUBLIC BATHS
LIBRARY
DANCE HALL
CINEMA: EXG.
NEW
OPEN SPACE: PUBLIC
PRIVATE
CAR PARKS & GARAGES
BUS STOPS
COMMUNAL LAUNDRIES & DRYING ROOMS
PUBLIC CONVENIENCES - BOTH SEXES
PUBLIC HOUSES
100 0 100 200 300 400 500 600 FT.

Section Five

NEIGHBOURHOOD UNITS

Past and Present

EXTENSIVE REHOUSING IS INEVITABLE during the next decade in Birkenhead as well as the rest of the country. It is well to examine, therefore, the various forms of development which have grown up or been adopted in the past. To avoid the creation of future slums it is essential that the major mistakes of previous years should not be repeated.

The monotonous repetition of the 'by-law' housing of fifty years ago, with very long terraces of narrow-fronted dwellings with front doors opening direct on to a street of standard width and with little or no back yard, stands condemned by this generation.

The 'Garden City' type of development, evolved in reaction to the above, is seen at its best at Welwyn. Undoubtedly this conception was a great advance upon previous housing, but the very ideal of the garden city movement, to combine in one area the advantages of both town and country, has tended to result in a development that is rather nondescript, neither town nor country. For an entirely new town, set completely in a rural area, this form has certain advantages, but is unsuitable in an existing town.

The inter-war years produced another expression of urban growth created by the speculative builder which may be called 'suburban.' This consisted almost entirely of semi-detached villas, generally sub-standard in design and construction, erected on any land which happened to be in the market at a reasonable price, without regard to the ordered growth of the town as a whole. The motive, purpose and practice of this type of housing is inferior in every way to that of the garden city. When it has appeared in this country there has been no master plan, as in Amsterdam, to direct it.

Extensive schemes of housing by local authorities have resulted in a definite type of urban development (usually referred to as 'Council housing') which is akin in many respects to the garden city conception. Admirable in design, construction and siting, these estates have been erected with little or no regard (at least until recently) for those communal facilities which are necessary to a full life. Sites were reserved for schools and light industry, but they remained sites long after the houses were inhabited. Social centres were established in a sporadic fashion, and long after the need first became obvious.

Each of these forms of rehousing has distinct major disadvantages. The only new idea which has arrived since the garden city movement, so an authority* has recently said, is the return of the tradition of the village green and its inn, now called a community centre.

The Neighbourhood Unit

The conception of the neighbourhood unit is of recent date. It is only during the last decade that the special meaning which now attaches to the term has been developed. Accepting the need for the social well-being of the large town, it is necessary to work out some development of the physical form which will aid in establishing community life, and enable a proper measure of social amenities to be provided. The idea of the neighbourhood unit arises out of the necessity for doing this.

In the past the existence of physical barriers has been useful in preserving a sense of neighbourhood. In the future such features can be used again. The difficulty is with the present absence of barriers. To overcome this, a local government unit or ward might be used. We have not been able to adapt the existing wards, but we suggest a rearrangement of wards might follow. Otherwise we have determined areas in the more obvious way by following such barriers as railway lines and main highways, open spaces and parkways. Map No. 44 (page 57) shows in diagrammatic form what we suggest. The size adopted is from 8,000 to 10,000 people. Such a unit is large enough to embrace most people with their variety of experiences and tastes, and yet small enough to possess easy accessibility between the parts and to provide occasion for acquaintance.

---

* Christian Barman, architect, late of the London Passenger Transport Board, and now of the Ministry of Works.

Types of Neighbourhood Units

This form of development is applicable to areas of every density and location. A detailed description of the proportions of land allotted to housing and other uses is to be found in Appendix 14. We have, therefore, divided the area of the borough into some twenty neighbourhood units, each with its appropriate shopping and community centre and, as far as possible, its due quota of open space and recreative facilities.

The area which by reason of war damage, general deterioration and overcrowding demands prior consideration in redevelopment on the neighbourhood unit principle is that enclosed by Claughton Road, Park Road East, Conway Street and the railway. This has been replanned (see Map No. 48 (page 58) and detailed description elsewhere) as a guide to the development of those units which are now built up and densely populated. The communal facilities in this Central (Conway) Unit should be provided in every unit in proportion to its size and population and should include the following :

> Shops, schools, community centre, dance and assembly hall, churches, public baths (probably one of these to several adjacent units), clinics (maternity, dental and skin), clubs, nurseries and nursery schools, branch library and communal laundries.

An alternative type of layout, suitable to any fairly level site, is suggested for the Conway Unit. Called the 'Hexagon Plan', from the disposition of the dwellings, this form of housing achieves a gross density of about 30 dwellings or 120 persons to the acre, together with large public open space, big enough to enclose the present Town Hall buildings, as well as private gardens, and six large communal rooms to each hexagon. Maps 57 to 61 (pages 88 to 90) illustrate this more scientific type of development, with its smaller area given up to roads, and greater space therefore for gardens, private and public.

Accommodation

The most important element is the total of dwellings sufficient to house 10,000 people. Within this total there should be variety in types of accommodation corresponding to variations in rents, income group and size of family. The hexagonal scheme for instance provides for six sizes of family in each hexagon. As well as family dwellings there ought to be accommodation for both old people and single people, a proportion that varies in different towns but ought to be estimated as closely as possible. The siting of various types of dwelling may not follow any set formula, but certain principles would generally apply. Dwellings round oval greens would be in a more friendly relation to one another than dwellings on roads, and if the greens radiated like the petals of a flower from the community centre, the inhabitants would all naturally gravitate towards it. At the other end of the greens could well be the nursery and nursery school. Flats would be best placed near a public open space. In any plan, however, a local centre should be provided, and it is there the community building should be.

Open Space

The second most important element in the neighbourhood should be the open space for different purposes. It should be systematised and closely related to the dwellings. When the nature of the site allows, it is preferable to have continuous park and playground pattern (see our suggestions for Mersey and Victoria Parks, and the site of the present hospital), providing safe space for children. A substantial part of the open space may well be situated on the perimeter of the neighbourhood, where it would act as a buffer to housing groups and traffic arteries. Even in this position however, such open space should never be more than a quarter of a mile from any part of the neighbourhood.

Schools

The siting of the primary school should receive early consideration in new areas where there is only one in the neighbourhood. It should be near the centre. Where there are two, each should be centred on half the residential area. The schools would then be in easy walking distance of each home, and access to them should be arranged so that children should only have to cross minor roads. Secondary schools might well be at the perimeter of the neighbourhood, as they would be shared by other neighbourhoods. The 16 acres required for each complete post-primary school unit would helpfully increase the buffer space between units if the school is so placed.

Shopping

The local shopping centre is an important element in the neighbourhood unit. One of the key factors is the knowledge of the number of shops required. One shop per 100 to 150 inhabitants, or 70 to 100 shops in a neighbourhood of 10,000, is an outside estimate but proximity to a main shopping centre with its attractive multiple stores will require this estimate to be modified.

Light

In considering the space about dwellings, two forms of lighting are to be taken into account, namely sunlight and daylight. The securing of the former is a matter of orientation, and the space between the buildings. With regard to the latter a reasonable working rule is that, in ordinary two storey housing, there should be to the sill of the lowest window 15 to to 18 degrees of light. In the hexagonal planning shown, the angle of light to the sill of the lowest window over a three storey building opposite is 7 degrees, or 11 degrees better than the Ministry of Town and Country Planning calls for.

No. 1
Central Conway Unit

This unit is described in detail in Appendix 12. The other proposed neighbourhood units are individually described below and should be read in conjunction with Maps Nos. 42, 44 and 48 (pages 66, 57 and 58) and the relevant appendices.

No. 2
Park Unit

Sandwiched between Birkenhead Park and the Industrial Zone, this area is comparatively small in extent, but its existing population is high. It contains Park Station, which connects direct with Liverpool and serves many hundreds of non-residents. Therefore it is proposed that the existing shops by the station should be developed as the normal shopping and community centre for the whole of this unit. With the introduction of some three-storey maisonette dwellings, it is possible to re-house the entire existing population of this unit.

No. 3
St. James's Unit

St. James's Church dominates this fairly large unit, and the general layout is determined by the seven roads radiating from its commanding island site. About half this area has recently been developed as a Corporation Housing Estate and the future pattern will therefore be largely unchanged. It is proposed that the existing new shops along Hoylake Road be extended to the laundry. From Hoylake Road an entrance will be made to the open ground at the rear, where there will be a new community centre supplying local needs for which no provision is made at present.

No. 4
Claughton Unit

Enclosed by Bidston, Upton, Shrewsbury and Slatey Roads and Birkenhead Park, this unit now consists of large old-fashioned residences in extensive gardens, and the population is therefore low. Recently, partly owing to the decreased demand for large houses, development has been permitted in the vicinity of St. David's Road at 10 houses per acre and this tendency will undoubtedly increase. At the bottom of Upton Road we propose a roundabout into which all roads will converge, and round which a more suitable shopping and community centre will arise embodying existing shops and the new Hamilton Memorial Church.

No. 5.
Grange Unit

Situated between Slatey and Borough Roads this unit is now densely populated and some reduction is proposed. No separate shopping and community centre is envisaged owing to the proximity of such facilities in the larger adjoining units, but there will be some local shops in Oxton Road.

No. 6
Mersey Park Unit

Accommodating many workers in the shipbuilding yards, this unit has a high density and with the introduction of some maisonnette dwellings this remains unchanged. The proposal that the present Municipal Hospital and Institution shall be rebuilt on modern lines elsewhere will leave a substantial site for new open space and recreation. For community and shopping facilities it is suggested that the present method of allowing shops to front Borough, Derby, Old Chester and Church Roads be discontinued and a determined effort be made to develop a first-class shopping and community centre between Church and Derby Roads. Subsidiary shopping centres might be permitted in Old Chester Road, adjoining Green Lane Station and adjoining the Plaza Cinema in Borough Road.

No. 7.
Oxton Unit

The shopping and community centre is an extension of the existing one at the junction of Claughton Firs and Rose Mount. This focal point will increase in importance as the whole planning scheme develops, as it will become a main junction of Loop Road No. 2, and roads will radiate from here to link up with all parts of the town. We have therefore shown a large roundabout to deal with the increased traffic and to provide for an extensive shopping centre. The existing density should be increased as the large houses with their extensive gardens become redundant.

Nos. 8 and 13.
Holm Park and
Prenton Units

The area of land forming these two units lying north and south of Woodchurch Road is partly developed with modern residential property and is partly undeveloped residential land. Off this main road and opposite to the present brickfields a site will be reserved for shopping and communal facilities, around which future development will take place. Additional open space will be provided when the brickfields are worked out. Provision is made for a substantial increase in population as there is so much undeveloped land existing.

No. 9.
Victoria Park
Unit

This large densely-populated unit surrounds Victoria Park, and has a great number of scattered corner shops. The density should be diminished and the shopping facilities should be concentrated first in Old Chester Road (between Union Street and St. Paul's Road), and second in the triangle formed by Old Chester Road, Grove Road and Mulberry Road. The latter will serve the Tranmere and Rock Ferry residents and will include the existing branch library and new cinema, community hall, lecture rooms, etc. It is unfortunate that a main traffic route passes through the unit, but we feel that by providing service roads fronting the shops, and possibly a subway under Old Chester Road, accidents will be reduced to a minimum.

No. 10.
Rock Park Unit

Three quarters of the 67 acres comprising this, the smallest unit, are devoted to housing and the existing population will be approximately doubled. Lying between New Chester Road and the River Mersey, this area includes the southern half of the new Rock Ferry Promenade, which will open up parts of the hitherto hidden river front to the general benefit of the townspeople. We suggest that shop development should be prohibited along the New Chester Road and that a convenient site be allocated in Rock Lane East for shopping and communal purposes.

No. 11.
Egerton Park
Unit

Bounded by Borough Road, Bedford Avenue and New Chester Road, this area is on the southern boundary of Birkenhead and adjoins Bebington. It is suggested that the main line railway should be screened by a line of tall trees and a thin strip of public open space, in which allotments be permitted. For shopping and social needs a centre is proposed at the junction of Bebington Road, Dacre Hill and King's Lane. Shops and communal buildings should be allowed fronting both sides of the road commencing in Old Chester Road and Rock Lane West and proceeding along Dacre Hill to Bebington Road. This would combine with the existing shopping area at the junction of King's Lane.

No. 12.
Devonshire Unit

This small unit comprises the Corporation's Orred Estate and the area between Prenton Road West and Singleton Avenue. The form and density are therefore, to a major extent, pre-determined. Woodchurch Lane, although a minor traffic road, is already a thriving shopping centre and we suggest that this be developed solely for shops and communal buildings.

No. 14.
Bidston and Oxton Park Unit

In the best residential part of the Borough and overlooking Wirral, this unit is divided by Upton Road into two sections. The northern half is sandwiched between Bidston Hill and permanent agricultural land, and the southern half encircles the Wirral Ladies' Golf Club. Most of the unit is developed at a very low density and the houses are very large with extensive gardens. It is therefore proposed that this be included in the open zone and the lowest density of 20 persons or 4 to 5 houses per acre, though each of these houses in time may be divided into two or three dwellings. No shopping centre or communal facilities are proposed as the close proximity of the shopping centres in Claughton Village and off Beryl Road will be sufficient for the needs of this area.

No. 15.
Noctorum Unit

This unit is enclosed by Upton Road and the railway and open land to east and south, and is entirely separated from adjoining units by permanent open space. It is proposed to create the shopping and community centre for this area in a southerly direction from Beryl Road. This will allow for the later detailed planning of an ideal layout round the centre, surrounded and entered by estate roads only.

No. 16.
Bidston Village Unit

This delightful village needs very careful and expert treatment—development is not the right word—to preserve its peculiar character. It is proposed to create only a small shopping and communal centre away from the old buildings. The site for this would be on the main road. All buildings should be subject to architectural supervision in order that they may be quiet and not distract the eye nor interfere with the character of the locality. Most of the through traffic will be diverted along the proposed new main road to the north.

No. 17.
Upton Unit

Upton Village and the surrounding development is incorporated in this area of 380 acres. It is bounded on three sides by permanent open space and on the southern side by the new Upton By-pass which should be a parkway. There are various existing densities in different parts of this unit and an overall average of 36 persons or 8 to 9 houses per acre is suggested. Existing shops are admirably concentrated and cannot be improved upon from the point of view of location. It is proposed, however, to increase the present facilities by introducing a village green round which further shops and communal buildings could be erected facing the main road. This green, bounded by the Church and the Victory Hall, will enhance the appearance of the centre and retain the rural atmosphere which now prevails.

No. 18.
Saughall Unit

The land comprising this unit is closely associated with development in the Moreton area of Wallasey. The area in Birkenhead is 125 acres and the ideal neighbourhood unit would be the amalgamation of this part with the adjoining area in Moreton. The communal centre should be situated on the boundary between the two. We are anticipating this development at some future date, and we are allowing for a shopping centre only at the junction of Saughall Massie and Overchurch Roads.

No. 19.
Woodchurch Unit

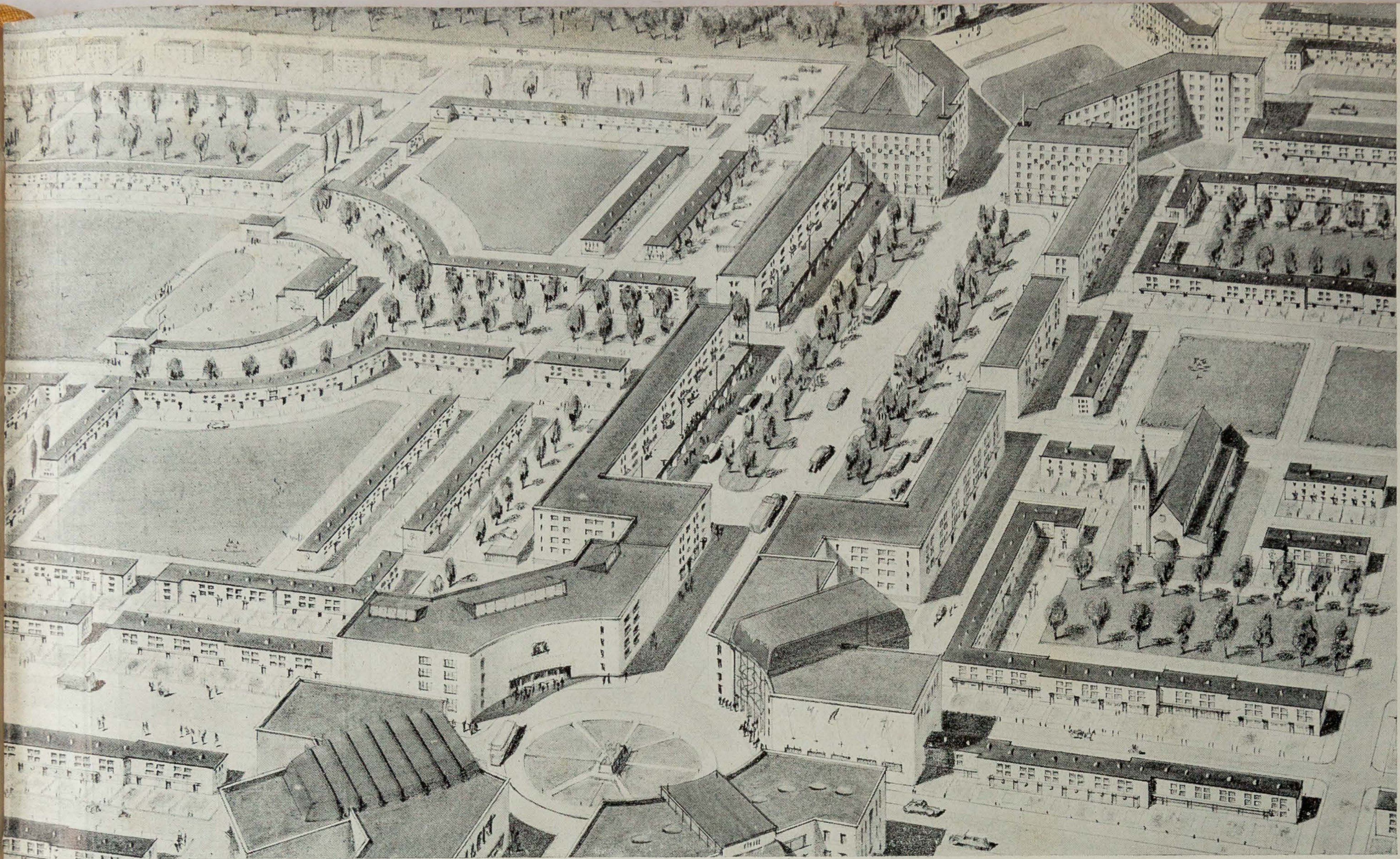
Preliminary plans for this area have been prepared by Herbert Rowse, F.R.I.B.A, and approved by the Birkenhead Corporation. The largest of the units proposed (404 acres), this will be the first to come to fruition and it will assist the redevelopment of the congested centre of the town by acting as an immediate ' intake ' area. This preliminary layout, however, embodies the requirements of a neighbourhood unit of suburban people with large private gardens, not for those tired out with physical labour in the daytime. Good provision has been made for a coherent shopping and community centre.

No. 20.
Thingwall Unit

Situated at the extreme south-west of the Borough, this unit is surrounded by open space and its present character is rural. It is completely segregated from the rest of the built-up area of the town. We suggest a position for the community and shopping centre off the main road and in the centre of the district, and this site should be so reserved in any proposals for future development.

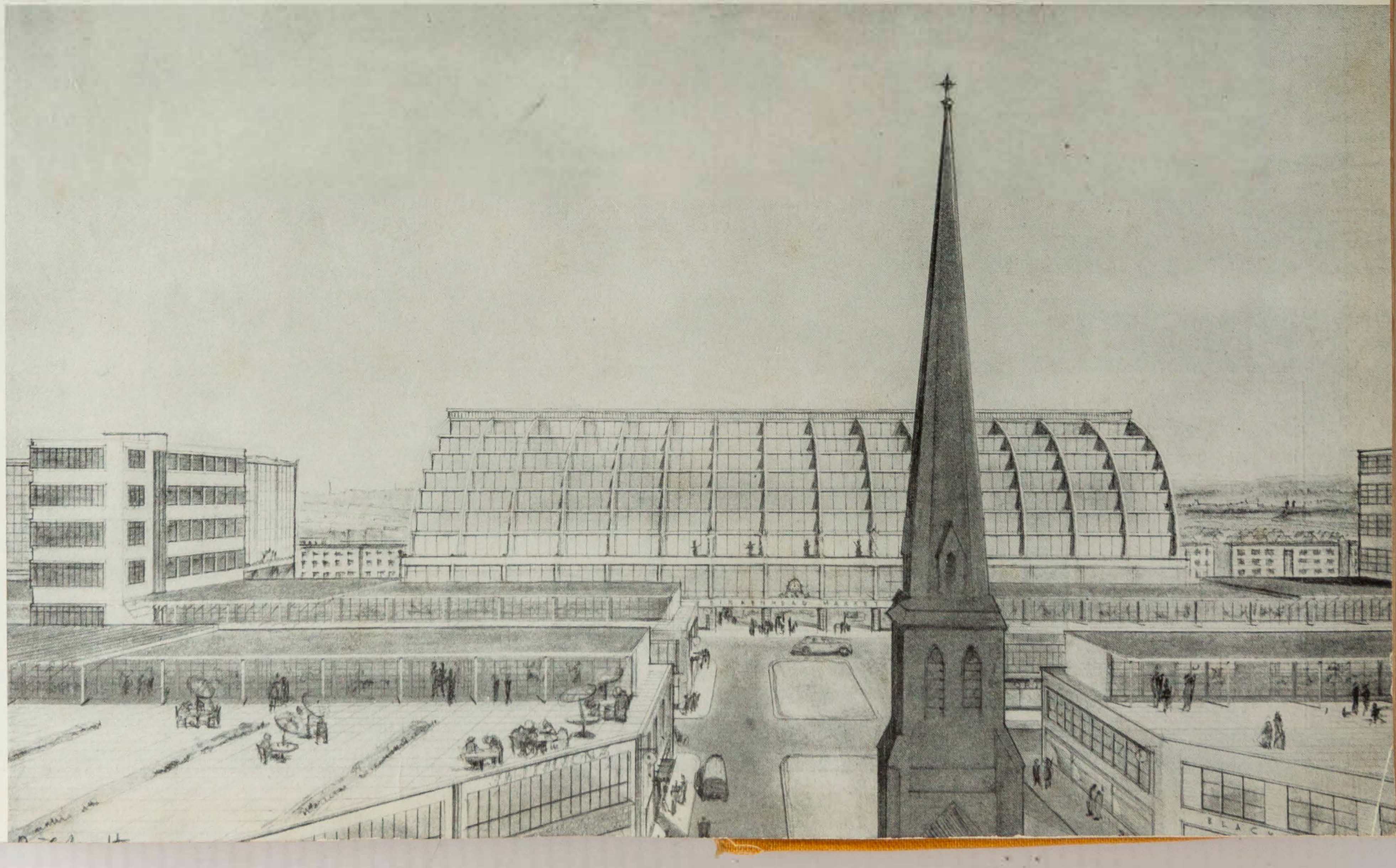
Schools

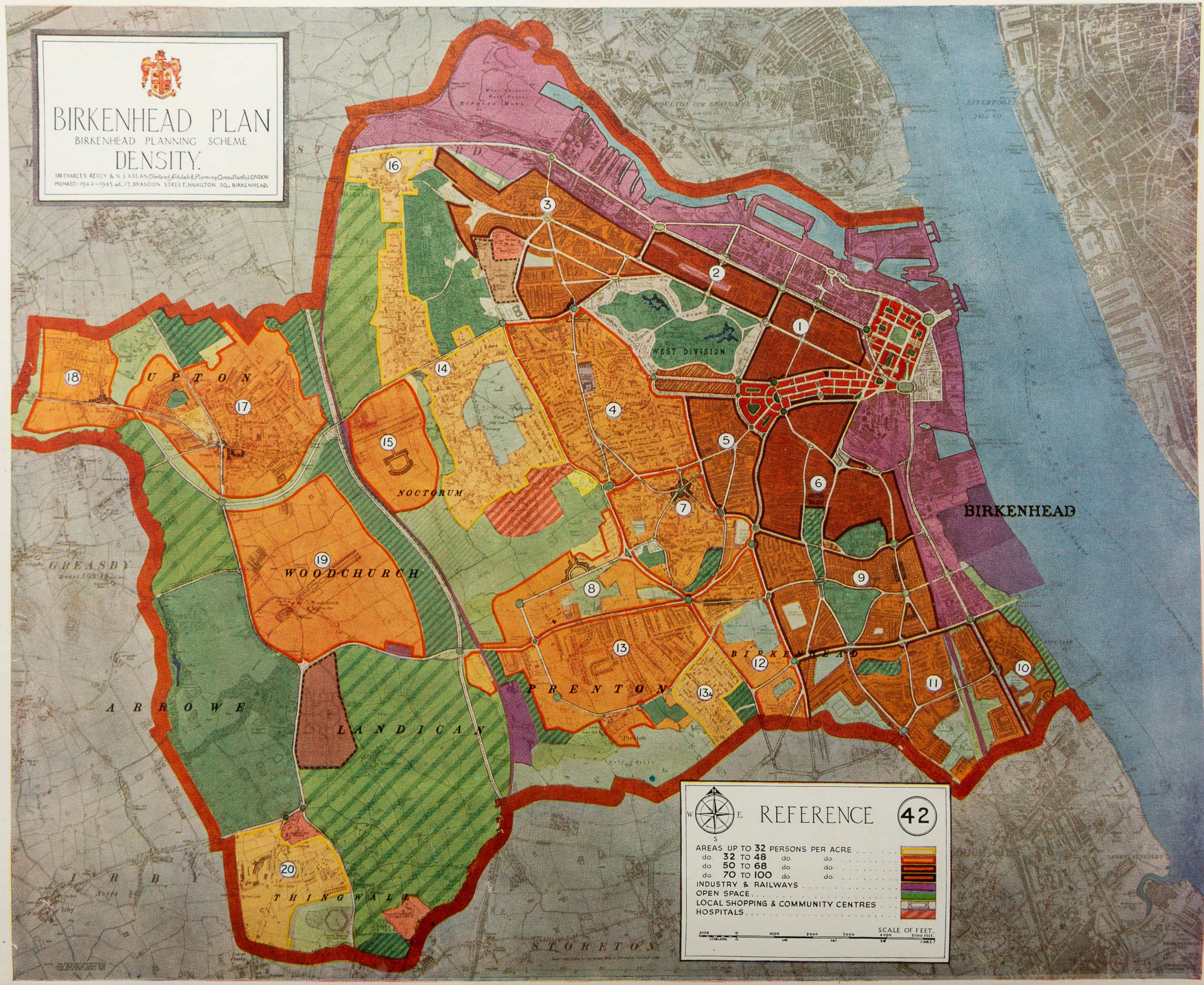
In every neighbourhood unit, preliminary provision should be made for new schools according to the requirements of the new Education Act, and allowing for the school-leaving age to be raised to 15 years. Provision should also be made for permanent green belts of agricultural land between units where this is possible. (For existing and proposed schools see Appendices Nos. 20, 21 and 22 and Map No. 41 (back cover)).



PROPOSED CONWAY NEIGHBOURHOOD UNIT. View of the shopping and communal centre along Conway Street with Birkenhead Park in the background.

PROPOSED MARKET HALL. View of the proposed retail Market Hall from St. John's Church, looking over the open roofs of the new shopping centre.




BIRKENHEAD PLAN
BIRKENHEAD PLANNING SCHEME
DENSITY.
SIR CHARLES REILLY & N J ASLAN Chartered Architects & Planning Consultants, LONDON
PREPARED 1944–1945 at 17, BRANDON STREET, HAMILTON SQ., BIRKENHEAD.
REFERENCE
42
N
W
E
S
AREAS UP TO 32 PERSONS PER ACRE
do. 32 TO 48 do. do.
do. 50 TO 68 do. do.
do. 70 TO 100 do. do.
INDUSTRY & RAILWAYS
OPEN SPACE
LOCAL SHOPPING & COMMUNITY CENTRES
HOSPITALS
SCALE OF FEET.
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1000
2000
3000
4000
5000 FEET.
1 FURLONG
1/4
1/2
3/4
1 MILE.
BIRKENHEAD
POULTON CUM SEACOMBE
LIVERPOOL
WEST DIVISION
NOCTORUM
UPTON
WOODCHURCH
GREASBY
ARROWE
LANDICAN
PRENTON
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THINGWALL
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Section Six

HOUSING AND POPULATION

Existing Conditions

THE BASIC FACTS from which a true picture of the existing housing, population, and overall density can be presented, refer to 1939 to avoid the fluctuations due to the war. In that year the land area of the borough was 7,925 acres, the estimated number of dwellings 35,463 and the estimated population 143,000 (estimate supplied by the Medical Officer of Health), i.e., 18 persons and 4.47 dwellings per acre, or 4.03 persons per dwelling. To determine the existing houses and population in each of the proposed neighbourhood units, which do not correspond to existing wards, the 1/1250 scale ordnance map (brought up to date for the purpose, but not of course distinguishing between flats and houses) has been used. The margin of error, as shown in the relevant Appendix, is extremely small.

The present distribution of the population shown on Map No. 15 (page 18) is very unequal, ranging from more than 200 persons per acre near the docks to a few persons per acre in the rural areas. The Housing Density and Pulmonary Tuberculosis Maps (Nos. 14 and 16 (pages 17 and 18) respectively) reveal identical concentration in the same areas where the maximum population dwells. Taken in conjunction with the Housing State of Repair Map (No. 13, page 15) there is an obvious relationship, almost a direct relationship, between unplanned overcrowded dwellings in a bad state of repair, and tuberculosis. It is reasonable that a similar inference should be drawn for other types of disease which are not yet legally notifiable. The economic practicability and advantage of well-planned dwellings at a reasonable density, with adequate recreational facilities, could not be better illustrated. These 'bad spots' have arisen from two main causes:

(1) The necessity for workers, e.g., casual dock labourers, to live within easy access of their work, and

(2) the unco-ordinated, uncontrolled and piecemeal nature of past development.

Planning will provide for the former need and eliminate the latter evil.

The prewar inspection of overcrowding revealed that, according to the minimum standards laid down in the Housing Act 1936 the percentage of overcrowding in Council dwellings in Birkenhead was 17.6%, compared with figures of 5.3% for the whole country, 10.4% for Liverpool and 6.2% for Bootle (see Appendix No. 15).

Balanced Development

To provide new houses is not sufficient: there must be provision for the recreative, social and spiritual needs of the people in the form of open spaces, recreation facilities and communal institutions. The Neighbourhood Unit, the main instrument of modern planning, is described elsewhere in this Report. By planning the town on these lines it is ensured that the people will have greater opportunity to live full and free lives, that more encouragement will be given to residents to take an active interest in local affairs, and that land wastage will be avoided.

New housing developments must be on a considerable scale during the next ten years in the form of:

(*a*) War damage reconstruction,

(*b*) Completely new estates, and

(*c*) Accretions to existing residential areas.

Only a thorough regard for all the relevant factors, human as well as economic, will prevent the creation of future slums and the principle of the Neighbourhood Unit will therefore apply to every part of the town. Replanning on the lines suggested will result in a more equitable distribution of the population within the borough, as well as providing communal facilities and social amenities to many people who are now denied them. It is axiomatic that as many workers as possible shall be rehoused within reasonable distance of their work consistent with the other claims for land use.

Density

While it is beyond the purview of an outline plan to determine the size of individual building sites, it is essential to suggest broad maxima for density zoning in relation to the existing structure of the town, the total existing and estimated future population and the new development and the reconstruction which has been, or shortly will be put into operation. To facilitate this, four types of density zones have been adopted and these, with the various neighbourhood units concerned, are suggested as follows :

1. *Central Zone* having a general density of 70-100 persons to the acre in houses and in three-storey flats and maisonettes, each flat and maisonette with its own entrance and garden. These are comprised in Park, Conway and Mersey Park units.
2. *Inner Zone* having a general density of 50-68 persons to the acre and including St. James's, Victoria Park, Egerton Park and Devonshire units.
3. *Suburban Zone* having density of 32-48 persons and made up of Claughton, Oxton, Holm Park, Noctorum, Upton, Saughall, Woodchurch and part of Prenton units.
4. *Open Zone* varying from 20-32 persons to the acre and including Bidston and Oxton Park, Bidston Village, Thingwall and part of Prenton units.

These densities, although not rigid, are arrived at after consideration of each neighbourhood unit in its relation to the borough as a whole and are sufficiently dependable to enable the necessary amount of open space to be allocated and the future population capacity of the town to be ascertained.

Population

As illustrated by diagram map No. 36 (page 28), after the phenomenal rise during the middle of the nineteenth century, the population steadily increased at the rate of 10,000 to 20,000 each decade until 1920. For the next ten years until 1930 the number of people remained, with small fluctuations, at about 152,000, but since 1934 the tendency has been for the population steadily to decline each year until in 1939 it was estimated at 143,000. There is reason to believe that, allowing for war-time conditions, the decrease has not been arrested.

Taking into consideration the steady diminution since 1934, and the national population trends, we think that it would be unreasonable to assume a future total of more than 150,000. This figure is identical with that taken in the Merseyside Regional Plan.

Overspill

As will be seen in detail in the Housing and Population Appendix, provision has been made for accommodating in the town about 140,000 persons, according to modern space and amenity standards, distributed approximately as follows :

Zone	Existing (1939)	Proposed
Central	55,000	33,000
Inner	63,000	40,000
Suburban	22,000	55,000
Open	3,000	12,000
Totals	143,000	140,000

Types of Housing Development

The resultant overspill* of approximately 10,000 is calculated on the basis of 4 persons to the dwelling, and compares with the figure of 34,000 given for Birkenhead in the Merseyside Regional Plan which was based upon 3.5 persons to the dwelling. As has already been mentioned the average number of persons to the dwelling is 4.03 over the whole of Birkenhead, and if this standard were applied to the Regional Plan the overspill would be considerably less than 20,000.

The constitution of the total approximate overspill of 10,000, with the estimates of migration from the overcrowded to the 'intake' neighbourhood units, can be seen in the Appendix No. 14.

The type of dwellings suitable for the redevelopment of the Central Area presented a peculiar problem. Generally, the accepted solution for high density areas takes the form of multi-storey flats, but this type of rehousing has been found to be unsuitable to the workers in Birkenhead. On the other hand, it is quite impossible to accommodate a sufficient number of families to the acre by means of two-storey houses.

It is therefore suggested that the main type of redevelopment in the central zone be in the form of three-storey maisonettes, the lower floor being a self-contained flat and the upper floors a normal two-storey family dwelling. This may be reversed with the flat at the top and the family house below. Flats for aged people would be on the ground floor and those for childless couples and unmarried persons on the top. Map No. 58 (page 90) illustrates the type of dwelling described. Each part, i.e., flat and family dwelling, will have a separate front door and garden on opposite sides of the building and the dividing floor between the two dwellings should be given special consideration for sound resistance and fireproofing.

The adoption of the three-storey maisonette type of rehousing permits a net density (including half the width of roads back and front) of 43 dwellings per acre or a gross density (deducting for open space, communal facilities, schools, etc.) of 23 to 25 dwellings, or 29.7 if the hexagonal plan is adopted. This approximates from 100 to 120 persons per acre.

Although multi-storey dwellings have proved unsatisfactory in Birkenhead for the lower wage group of residents there is undoubtedly a demand for flats in well-designed blocks among the clerical and professional groups. A limited number of such blocks is proposed for the central zone in suitable positions. It is also suggested that two-storey houses in terraces be allowed in this zone, but the number will have to be limited if the requisite densities are to be maintained.

In the inner zone it is proposed that two-storey houses should predominate, although when detailed plans are made for the development of each unit it may be found that density considerations will necessitate the inclusion of a small proportion of three-storey maisonettes. The suburban and open zones will consist almost entirely of two-storey houses.

Mr. C. H. James, A.R.A., F.R.I.B.A., the well-known designer of small houses, in the 'Merseyside Regional Plan', says, ". . . dwellings should be designed as terraces, quadrangles, or crescents, and should not take the form of individual pairs or groups of houses designed as units in themselves . . . it is clear that this must be done if our towns are to be satisfying æsthetically, quite apart from the fact that consideration of space and land value imply a density obtainable only by such means."

" There is really little to be said for the semi-detached villa, except that it is very easy to design and has three external walls for light. Outweighing these advantages are the disadvantages that there is an additional wall to pay for and warm, that more frontage is required and living rooms almost inevitably share a party wall, and that side windows and doors face those of the adjacent house."

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* The number of persons who are displaced by a replanning scheme : in this case the normal population (taken as 150,000) less the number which can be accommodated in the new plan (estimated at 140,000).

With this we concur and our proposals for the redevelopment of the typical central neighbourhood unit are based upon this generally accepted view.

District Heating

It is suggested that careful consideration should be given to the matter of supply of heating and hot water on a communal or district basis. The grouped and terraced dwellings shown in the neighbourhood unit already planned lend themselves to the economical installation and maintenance of this form of service, especially where there is an existing source of surplus heat from large institutions (e.g., the main electricity station in the Conway Unit). Several successful experiments of this kind have been carried out in various parts of the country during the last twenty years, notably at Dundee and Manchester, and it is reported that the result has been a substantial economy to householders and local authorities, amounting in Manchester to a saving of from £12 a house to £1 when district heating is used.

An additional advantage, and one which has added significance for industrial areas, is that the elimination of wasteful open coal fires would be a great factor in smoke abatement. The central part of Birkenhead, in common with Merseyside generally with its damp atmosphere, suffers much from smoke. New buildings are rapidly covered with a drab veneer of soot, and no measure should be neglected which would help to alleviate or prevent this.

The Future

In Birkenhead, as in the whole country, housing is the first priority item in any planning scheme. Before the war some 500 to 750 dwellings were completed every year by the local authority and private builders. Since 1939 all this normal building has ceased, and to these cumulative arrears must be added at least 2,097 dwellings destroyed or damaged beyond repair by enemy action. In addition the absence of normal repair and maintenance during the war years, and the houses damaged (but repairable) by enemy action, has materially increased the number of dwellings in the slum and sub-standard categories. Assuming the life of a house to be 80 to 100 years, the annual number of worn-out dwellings which require to be replaced is at least 350 to 440.

The total number of new dwellings required immediately (ignoring those required by the increasing number of families in relation to the total population) may be approximately summarised as follows:

5 years normal replacement at an average of 400 dwellings per annum	2,000	dwellings
Dwellings scheduled by the Medical Officer of Health as "not in all respects reasonably fit for human habitation" on 24th May, 1944	1,912	„
Destruction by enemy action during the war	2,097	„
Total	6,009	„

With an average annual replacement of 400 dwellings the totals required at the end of each of the next ten years will be:

1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955
6009	6409	6809	7209	7609	8009	8409	8809	9209	9609	10,009

The shortage of labour and materials will undoubtedly prevent the realisation of these figures for several years. Similar conditions, to a less extent, operated after the 1914-18 war and the following table shows that seven years elapsed before the rate of supply approached the rate of demand. Whereas the average annual number of new dwellings for the whole inter-war period was 387 the average for 1918-25 was only 146.

Number of Dwellings erected from 1918 to 1939 in Birkenhead

Year	Private Enterprise	Local Authority	Total
1918-19	9	—	9
1919-20	2	—	2
1920-21	164	—	164
1921-22	178	—	178
1922-23	103	—	103
1923-24	118	—	118
1924-25	447	—	447
1925-26	200	349	549
1926-27	473	—	473
1927-28	515	340	855
1928-29	181	229	410
1929-30	152	—	152
1930-31	78	214	292
1931-32	125	224	349
1932-33	210	112	322
1933-34	343	37	380
1934-35	566	357	923
1935-36	436	166	602
1936-37	372	159	531
1937-38	503	263	766
1938-39	296	283	579
1939-40	250	57	307
1918-40	5721	2790	8511

Rate of Rebuilding

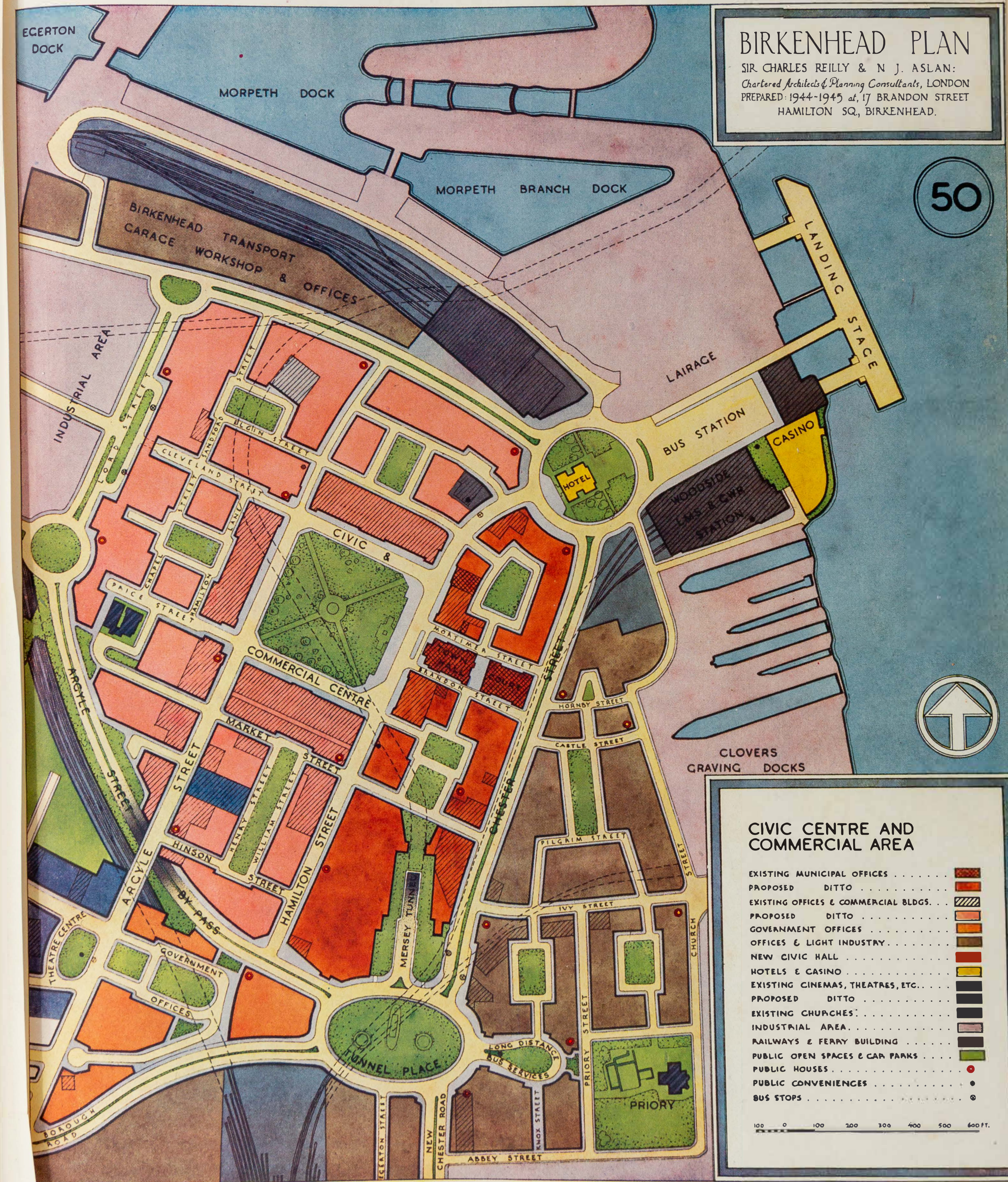
The general position with the cessation of hostilities in this war is, however, vastly different from that which pertained after 1918. Housing programmes and measures for the most fruitful use of limited labour and materials are well advanced in the country generally. This is particularly so in Birkenhead where plans for extensive development are already under weigh in the Woodchurch and Orred estates. These two projects include 2,522 and 528 dwellings respectively. There are also 500 temporary prefabricated dwellings to be erected shortly to alleviate the immediate shortage, but these of course must be discounted in any estimate of more than ten years (the permitted life of a temporary house). Private building will, as far as can be foreseen at present, supply dwellings at least at the same rate.

Therefore we believe it is a reasonable assumption that, given adequate labour and materials and expert initiative, at the end of the first ten-year period in the realisation of the replanning scheme some 10,000 new dwellings will be completed or in course of erection.

Blighted Areas

The reconstruction of 'blighted' areas (slum and sub-standard) must be accomplished in units of the largest practicable area. Many blocks of dwellings in the Central, North and East parts of the town are ripe for redevelopment. We suggest that immediately first priority demands are satisfied, the residents in one blighted block be transferred as far as possible *en bloc* to an intake area (e.g., Woodchurch). This will preserve neighbourliness and communal spirit and avoid many of the evil consequences (increases in juvenile crime, drinking, etc.) which followed the indiscriminate uprooting of individuals under slum-clearance schemes. It will also create an empty, well-defined replacement area immediately available for replanning as a whole. In this way the whole town will be redeveloped and the replanning scheme (as far as housing is concerned) will be realised in a series of definite, well-defined, workable stages.

Never has there been such an abundance of information and research in connection with the housing of the people as there is today. There is no reason therefore why the present poor and grey dwellings in the centre of Birkenhead should not be rebuilt in the light of the latest modern knowledge. Given communal amenities and expert design and supervision on the lines we have suggested, such redevelopment could transform the drab heart of the town into an attractive area in which it would be both pleasant and good for people to live.

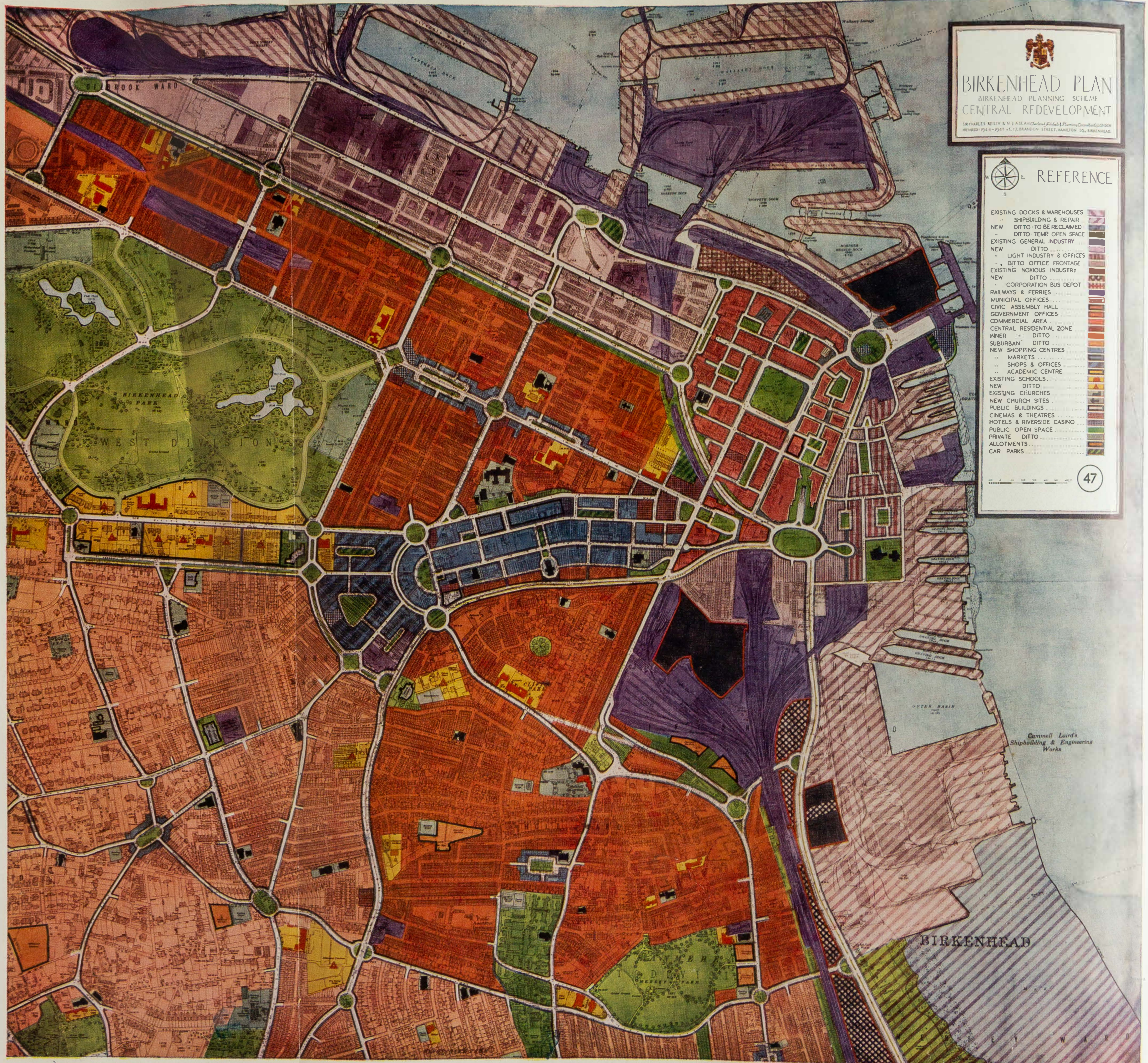


BIRKENHEAD PLAN

SIR CHARLES REILLY & N J. ASLAN:
Chartered Architects & Planning Consultants, LONDON
PREPARED: 1944-1945 at, 17 BRANDON STREET
HAMILTON SQ., BIRKENHEAD.

CIVIC CENTRE AND COMMERCIAL AREA

EXISTING MUNICIPAL OFFICES	▩
PROPOSED DITTO	■
EXISTING OFFICES & COMMERCIAL BLDGS.	▨
PROPOSED DITTO	■
GOVERNMENT OFFICES	■
OFFICES & LIGHT INDUSTRY	■
NEW CIVIC HALL	■
HOTELS & CASINO	■
EXISTING CINEMAS, THEATRES, ETC.	■
PROPOSED DITTO	■
EXISTING CHURCHES	■
INDUSTRIAL AREA	■
RAILWAYS & FERRY BUILDING	■
PUBLIC OPEN SPACES & CAR PARKS	■
PUBLIC HOUSES	●
PUBLIC CONVENIENCES	•
BUS STOPS	⊛


BIRKENHEAD PLAN
BIRKENHEAD PLANNING SCHEME
CENTRAL REDEVELOPMENT
SIR CHARLES REILLY & N. J. ASLAN Chartered Architects & Planning Consultants, LONDON
PREPARED: 1944–1945 at 17, BRANDON STREET, HAMILTON SQ., BIRKENHEAD.
REFERENCE
W
E
S
EXISTING DOCKS & WAREHOUSES
" SHIPBUILDING & REPAIR
NEW DITTO · TO BE RECLAIMED
" DITTO · TEMP. OPEN SPACE
EXISTING GENERAL INDUSTRY
NEW DITTO
" LIGHT INDUSTRY & OFFICES
" DITTO OFFICE FRONTAGE
EXISTING NOXIOUS INDUSTRY
NEW DITTO
" CORPORATION BUS DEPOT
RAILWAYS & FERRIES
MUNICIPAL OFFICES
CIVIC ASSEMBLY HALL
GOVERNMENT OFFICES
COMMERCIAL AREA
CENTRAL RESIDENTIAL ZONE
INNER DITTO
SUBURBAN DITTO
NEW SHOPPING CENTRES
" MARKETS
" SHOPS & OFFICES
" ACADEMIC CENTRE
EXISTING SCHOOLS
NEW DITTO
EXISTING CHURCHES
NEW CHURCH SITES
PUBLIC BUILDINGS
CINEMAS & THEATRES
HOTELS & RIVERSIDE CASINO
PUBLIC OPEN SPACE
PRIVATE DITTO
ALLOTMENTS
CAR PARKS
47
BIRKENHEAD PARK
WEST DIVISION
OUTER BASIN
Cammell Laird's Shipbuilding & Engineering Works
BIRKENHEAD

Section Seven

THE
REPLANNING OF CERTAIN AREAS

(A) CIVIC AND COMMERCIAL CENTRE

Location

THE AREA ROUGHLY north of Borough Road and the Priory, and bounded by the railway cutting on the west, the goods station and railway on the north, and the graving docks on the east, will, with the exception of Hamilton Square, be rebuilt in any case within the next fifty years. It has been thought well, therefore, to replan this in detail as the Civic and Commercial Centre of the town, which it naturally is. All the main roads have been maintained.

Traffic

At present different categories of traffic wander through this area, great lorries and trailers often being seen in Hamilton Square itself. By the elliptical *place* which has been planned at the Tunnel entrance, and by the new Argyle Street By-pass, this heavy traffic will be diverted. The main passenger bus traffic, however, will still emanate from Woodside, but owing to the new roundabout at that point will be sent right and left in definite directions. Adequate car parks are placed adjacent to the new blocks of offices into which the area is divided. A new long distance bus terminus is planned in an embayment east of the Tunnel *place* facing new Government Offices and the Shopping Centre. Pedestrian traffic can circulate in safety round this area by the system of squares and secondary roads.

Municipal Offices

The existing Town Hall is quite inadequate to house the various departments of the Borough Council, and numerous premises in Hamilton Square, Mortimer Street, etc., are already serving this purpose. To collect the scattered departments and at the same time to provide for inevitable future extension, the entire area between Hamilton Street and Chester Street, from Woodside to the Tunnel Entrance, is allocated to Municipal Offices, making extensions on either side of the Town Hall.

Government Offices

Similarly, the triangular area of building bounded by Argyle Street, Argyle Street By-pass and Borough Road is reserved for Government Offices. Already in this part exist the General Post Office, the Sorting and Inland Revenue Offices. It is felt that if all Government Offices, e.g., Public Assistance, Employment Exchange, etc., were centralised here, both the Ministry of Work's Directorate of Lands and Accommodation (responsible for finding sites for Government Offices) and the people of Birkenhead would benefit.

Commercial Centre

General commercial offices and buildings, at present indiscriminately mixed throughout this area, with industry, shops, houses and amusements, form the predominant user and occupy in the plan the area to the north, south and west of Hamilton Square. The area between Chester Street and Church Street, now mainly of a rather poor residential kind, has been broadly zoned for offices and light industry. A limited amount of well-designed housing in flats might be permitted under restriction.

Transport Garage and Offices

A new Corporation bus office and garage placed next the G.W.R. and L.M.S. Goods Railway, and over what is now Canning Street, supersedes the existing unsatisfactory station at Laird Street. Consultation with officials of the Corporation Bus Services has shown that the site is eminently satisfactory, and will result in a substantial economy of petrol and oil consumption, both these being obtained direct from tankers.

Railways and Industry

No alterations are proposed in the railways or the industrial part (of this area) or in the docks facing the Mersey. Conferences have been held with the Railway Companies and the Mersey Docks and Harbour Board and we have reached the conclusion that there is insufficient reason for making any drastic alterations. As much of this work is below ground level, e.g., tunnels, cuttings and docks, any major alteration would be prohibitively expensive and extremely difficult to execute.

INDIVIDUAL BUILDINGS

Hamilton Square

The splendid Hamilton Square, with its too revealing open corners completed in sympathetic architectural style and its Gothic monument removed, will continue to provide an admirable setting for the Town Hall. It is suggested that the protection afforded to the Square under the Birkenhead Corporation Act of 1930, should be extended to cover the new corner buildings immediately they are erected, so that in the future the uniformity of the completed Square may be maintained. (See page 77).

The Hamilton Square Mersey Railway Station, with improved access from front and sides (but without its red brick tower), the Mersey Tunnel Ventilating Station, the Savoy Cinema in Argyle Street and the Brunswick Methodist Church in Price Street (with improved access) will remain.

Priory

Special protection should be given to the Priory and St. Mary's Church as the former is Birkenhead's most ancient building. A new and well-framed view of these buildings, with the spire seen centrally, is opened up from the new Tunnel *Place* and Grange Road.

Woodside

A modern multi-storey hotel has been designed for the Woodside roundabout, and a new Casino by the Ferry. This latter building, tall and largely in glass, not only provides a fine view of the river and its shipping, a thing Birkenhead lacks, but, lit up at night, a pathway of light to the Liverpool landing stage attracting young people to come over by ferry and dance there. These two buildings should much enhance to the visitor the appearance of the town from the river.

Civic Hall

The existing main hall in the Town Hall being inadequate for local activities it is proposed that a Civic Assembly Hall be erected in Hamilton Street at the south-east corner of Hamilton Square.

Architectural Style

It is proposed that the heights of buildings should be broadly regulated as follows :—

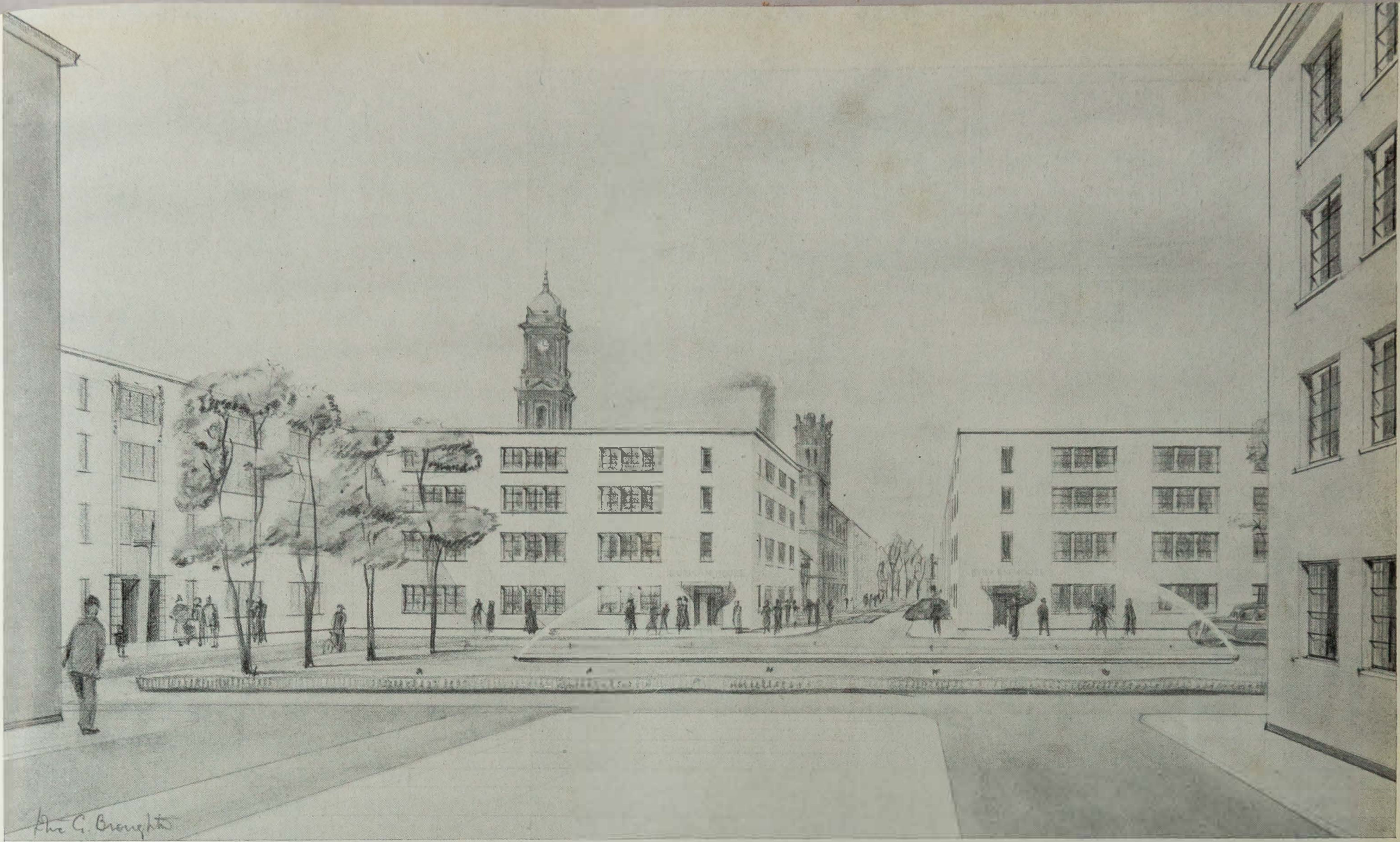
(a) The corner buildings to Hamilton Square to conform in all lines with and to be congruous in style with the existing buildings.

(b) The new Municipal Offices, except those overlooking Hamilton Square and those overlooking the new Tunnel *Place,* to be not more than four storeys in height with a maximum of 45ft.

(c) Buildings fronting the Tunnel Place are to be allowed up to seven storeys, with a maximum of 80 ft. to the parapet in order to be in scale with this large open space.

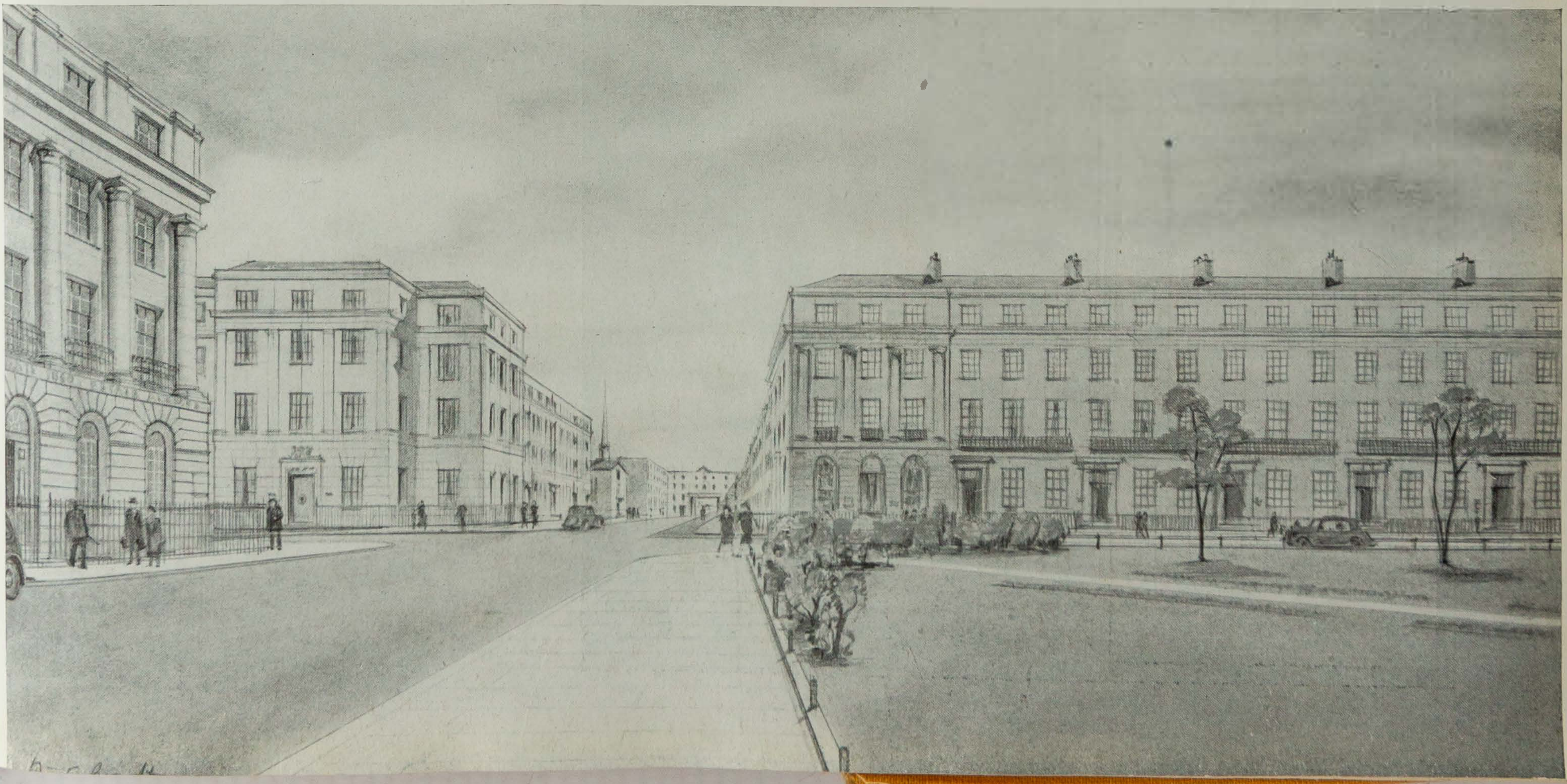
(d) In all other places, except in such spots as maybe necessary for architectural composition, e.g. in the blocks fronting Lord Street, Woodside roundabout, and the Government Offices, the general height be three storeys with maximum heights to the parapet of 35 ft. and 34 ft. to top of cornice, which is the height of the present buildings. These are heights to which the streets were designed originally.

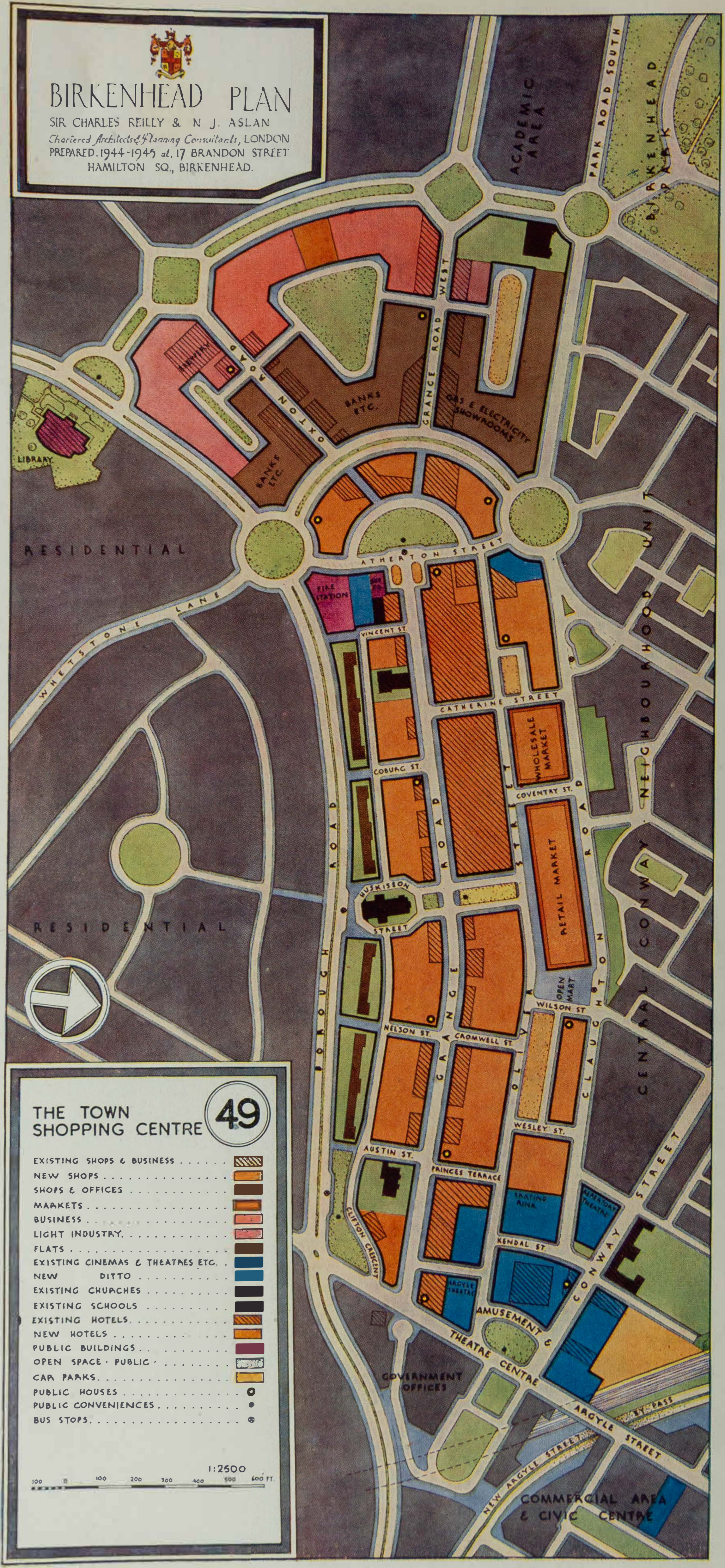
Questions of style of new building must be left to the new Borough Architect in conjunction with the architects of the individual buildings. It is suggested, nevertheless, that the facing materials be restricted to warm reddish-brown bricks and local stone. Yellow brick and all other coloured facades and black mortar should be prohibited.



PROPOSED COUNCIL OFFICES. Proposed wings to the Town Hall to accommodate all the Council Offices some of which are housed in converted domestic buildings. Car parks are situated under the open courts.

PROPOSED HAMILTON SQUARE CORNERS showing new buildings brought forward to close the corners of the Square.





THE SHOPPING CENTRE should express the pleasure inherent in shopping. It should develop around an existing nucleus from which industry, housing and heavy traffic have been eliminated. An attractive centre could attract shoppers from outlying parts of Wirral as well as from Birkenhead itself, who now travel to Liverpool to satisfy their needs.

(B) TOWN SHOPPING CENTRE

General

Existing shopping facilities in the borough are far too scattered and too interspersed with other kinds of user to attract sufficiently the many people from the region who travel to Liverpool to satisfy their needs. The excessive length of such areas is monotonous, wearying to the housewife and destructive of amenity. It is possible to walk from Balls Road to Hamilton Square, a distance of nearly 1½ miles, through shops which are in themselves mixed in character and mixed up with other types of development. Shopping routes exist via Borough Road and Exmouth Street, both of which are damaged, dilapidated and much inferior to Grange Road.

To express the gaiety and movement inherent in shopping, to save the purchaser's weary feet, and to achieve some æsthetic form, it is necessary to concentrate shops and eliminate other unsuitable elements, e.g. heavy traffic, industry and housing. Control of traffic, achieved by good physical planning, is always essential for the safety of people.

Zoning

Any practicable re-planning scheme for shopping must develop round the existing centre, which is situated along the western half of Grange Road. Many multiple stores have recently developed here and cannot be disregarded. In the plan suggested the whole of this important road, widened and improved, forms an inevitable spine. The poor dilapidated residential flanks to Borough Road and Claughton Road, having a very limited life, are cleared, with the exception of certain sites fronting Borough Road. These should be redeveloped for shopping to supplement Grange Road. Certain minor redundant roads should be closed as shown, but the existing road system is largely retained.

Markets

Half-way along Grange Road, opposite St. John's Church, an open space and car park has been created. It is felt further that the site closing this space and fronting to Claughton Road is an ideal one for a new retail market. The existing market by the Tunnel entrance is inadequate and badly placed for the convenience of the majority of the population. A wholesale market and an open market with car parks adjoining are the right supplement to the retail market.

To screen the service backs of the shops, and having regard to the fall in ground levels from Grange Road to Borough Road, a series of 4-storey blocks of flats is proposed on either side of St. John's Church.

Charing Cross

Charing Cross, now a most unsatisfactory five-road crossing, which even traffic lights have failed to remedy, has been entirely replanned to act as a climax in the form of a semi-circular open space enclosed by a crescent of shops. Existing roads through these buildings are converted to pedestrian ways, and the traffic is directed to a new double carriageway beyond. West of this, up to the new Park-Library Crescent Road, a further area is reserved for shops, offices, banks, the new Corporation Gas and Electricity Show Rooms, business and, where it already exists, light industry. This part, where present shops line Oxton Road and Grange Road West, is intended as a reserve zone for future shopping.

Park-Library Crescent

The Park-Library Crescent forms a limit to the town Shopping Centre. The area west of this Crescent is to be devoted to residential use.

In this way the whole of the proposed Shopping Centre is enclosed in a frame of well-defined traffic roads, and freed from the dangers and inconvenience of superfluous vehicles. Buses, now rightly eliminated from Grange Road, will use Borough Road, Claughton Road and Atherton Street (one-way traffic). These and the smaller crescent are the only streets into which they will intrude. Suitable bus stops and lay-byes, it will be seen, have been allowed for in this and other parts of the shopping area.

Main Shopping Centre

Grange Road, now varying in width from 40 ft. to 60 ft., is widened throughout its length to 65 ft., that is 30 ft. carriageway and two 17 ft. 6 ins. pavements.

As the north side is more intensely and recently developed, with consequential higher land and rateable values, it is proposed that the widening shall be on the south side. On both frontages existing buildings are two and three storeys in height with an occasional tower. It is suggested that future development should be three storeys with higher balancing sentinel blocks at intervals of not less than one hundred yards, placed opposite each other and getting the best lights on their flanks. This will ensure that there is adequate sunlight and air and an atmosphere of spacious and punctuated design along the premier shopping street. The tall sentinel blocks will be eminently suitable for vertical department stores with upper floors for dress departments, cafes, luncheon and tea rooms, and living or caretaker's quarters at the top. As the ground falls away to the north and south of Grange Road, magnificent views will be afforded from the upper floors of these towers in all directions, but more important still, standing behind one another these tall blocks will add immensely to the vista, looking up the street and from the 'bus station and the Priory.

Hotels

The modern Central Hotel in Clifton Crescent is retained and the whole of the site up to Grange Road reserved for hotel purposes, and an improved open space is planned between Central Hotel and Borough Road. A commanding position for new hotels is reserved in the centre of the Park Library Crescent.

Places of Worship

Of the ten places of worship in the area, four—St. John's (Anglican), Grange Road (Methodist,) Salvation Army Hall, and St. Werburgh's (R.C.) are retained. Two of the remainder are not used for worship and the others are badly sited, in poor state of repair or of much declining use.

Fire Station

The Fire Station and Charing Cross Sub-Post Office are retained on approximately the existing sites, but the present buildings will have to be rebuilt in the not too distant future.

School

The existing school at the corner of Cole Street and Claughton Road is a recent building in a very good state of repair, and remains with the addition of about half-an-acre to the south.

Brewery

The main building of the Brewery in Oxton Road is retained and additional land allowed towards Borough Road for future expansion or for light industrial development.

Public Houses

It is suggested that the present number of public-houses (twelve) be unchanged, but to ensure a more even distribution, nearly one half of these will need to be re-sited as indicated on Map No. 49 (page 78).

Public Conveniences

Public conveniences, which have hitherto been placed in any available corner with insufficient regard for communal need, are placed in those spots where crowds congregate, e.g. near the Market, Theatre Centre, Library and important bus stops.

Height of Buildings

The following maximum building heights are suggested:

(a) *Grange Road.* Three storeys and 45 ft. at the frontage except for the tower blocks which should be limited to 7 storeys or 80 ft.

(b) *Buildings between Atherton Street and the Inner Crescent.* Three storeys and 40 ft. to form a continuous parapet line with the buildings fronting the roundabouts, i.e. flats, cinema, gas and electricity showrooms.

(c) *Buildings between the Inner and Park-Library Crescents.* Three storeys and 40 ft. with permissible increases at roundabouts and the central site allotted to future hotels.

(d) *Amusement and Theatre Centre.* A maximum of 50 ft. to the parapet is suggested, but one or more suitably placed and well designed towers may be permitted around the central open space at the discretion of the Borough Architect.

(e) *Borough Road Flats.* These shall be limited to 4 storeys.

Overspill of Population

Approximately one thousand houses in this area will, in the ordinary course of events, be ripe for demolition within a few years. It is suggested that these sites, as they become vacant, should be absorbed into the shopping area. This will mean that approximately four thousand persons will be displaced.

It is estimated that a further thousand people live above existing shops. At least twice this number will be re-absorbed in similar accommodation in the new scheme.

From 200 to 250 new dwellings will be provided in the flats facing Borough Road.

The resultant overspill is therefore as follows :

Displaced persons from existing houses		4,000
do. do. do. shops		1,000
Total displaced		5,000
New accommodation in flats	1,000	
do. do. do. above shops	2,000	
		3,000
Total overspill for whom accommodation must be provided outside the shopping area		2,000

It must be recognised that the concentration of the shops into one centre will release a considerable number of existing isolated shops in surrounding areas for other purposes, mainly residential, and thereby provision will be made for the natural absorption of a proportion of this 2,000 overspill.

Birkenhead, the largest and most important town in Wirral, should certainly increase in future in relation to the adjoining districts, and the new Shopping Centre, in common with other features of our Scheme, has been designed to serve and express this trend.

Long Distance Bus Station

The siting of the long distance bus terminus also serves this purpose, for not only is a new and attractive view opened of St. Mary's Church and the Priory, but, westwards, a clear view is given through the proposed Government Offices, up Grange Road to the sentinel blocks already described and shown on the drawings. Wirral shoppers will be able to see their destination and its character immediately on alighting from their buses.

The prosperity of the multiple stores recently established in Grange Road indicates a demand for this kind of shopping facility. The development therefore on the lines proposed in the Plan will meet this demand as well as that for smaller shops in between and for a market close at hand. The availability of the best class of shops for clothes, furniture, cars, etc., the provision of numerous well-planned restaurants and cafes (with roof gardens as shown elsewhere), the accessibility of long distance travel services and the proximity of adequate car parks, will, it is thought, ensure that the people of Wirral, many of whom are now attracted to Liverpool, will in future choose Birkenhead.

(C) AMUSEMENT AND THEATRE CENTRE

The confluence of Conway, Oliver and Argyle Streets lends itself to the establishment of an Amusement and Theatre Centre. Already existing are the Argyle Theatre (blitzed, but to be rebuilt), the Ritz (recently re-opened), Empire, Super and Queen's (obsolete) cinemas. Sites are allocated for a new Queen's Cinema, a Repertory Theatre, a Philharmonic Hall and a Skating Rink. A Repertory and Children's Theatre is appropriate to a town of the size of Birkenhead. A Birkenhead Philharmonic Hall would, we suggest, be a fitting War Memorial. The open space provided gives unity to this Theatre Centre. Adequate car parking facilities are given both here and in the immediate vicinity. The existing Conway Arms, with its white mortar joints so rare in Birkenhead, is one of the most recent and attractive public-houses in the borough and should be retained for the period of its natural life, after which the site should be included in the Theatre Centre. Provision is also made for the rebuilding of the Roxy and Claughton (re-sited) cinemas in the Charing Cross area.

(D) ACADEMIC CENTRE

The area enclosed by Park Drive, Alvanley Place, Grange Road West, St. Andrews Road, and the northern end of Palm Grove is replanned as an Educational Centre for the Borough. The proximity of Birkenhead Park, the central position of the area, and the existence of several schools combine to make this part eminently suitable for the development on the lines suggested.

New double-carriageway roads to east, west and south provide, with the Park on the north, effective physical limits and dilute the present small amount of traffic which dribbles through the area. All roads between Grange Road West and Park Road South are closed in the plan and pedestrian ways only are planned to connect these two thoroughfares, thereby ensuring greater safety for school-children and students.

Existing Educational Buildings to be Retained

1. Girls' Council Secondary (Grammar) School, Park Road South (modern building, opened 1928—500 girls).
2. Council Primary School, Cole Street and Claughton Road (modern building, opened 1929—300 junior mixed and 346 infants).
3. St. Hugh's R.C. Secondary (modern) School, Park Road South (opened 1922 and extended 1934—600 boys).
4. St. Anselm's College, Egerton Road (Secondary Grammar School with about 300 boys).

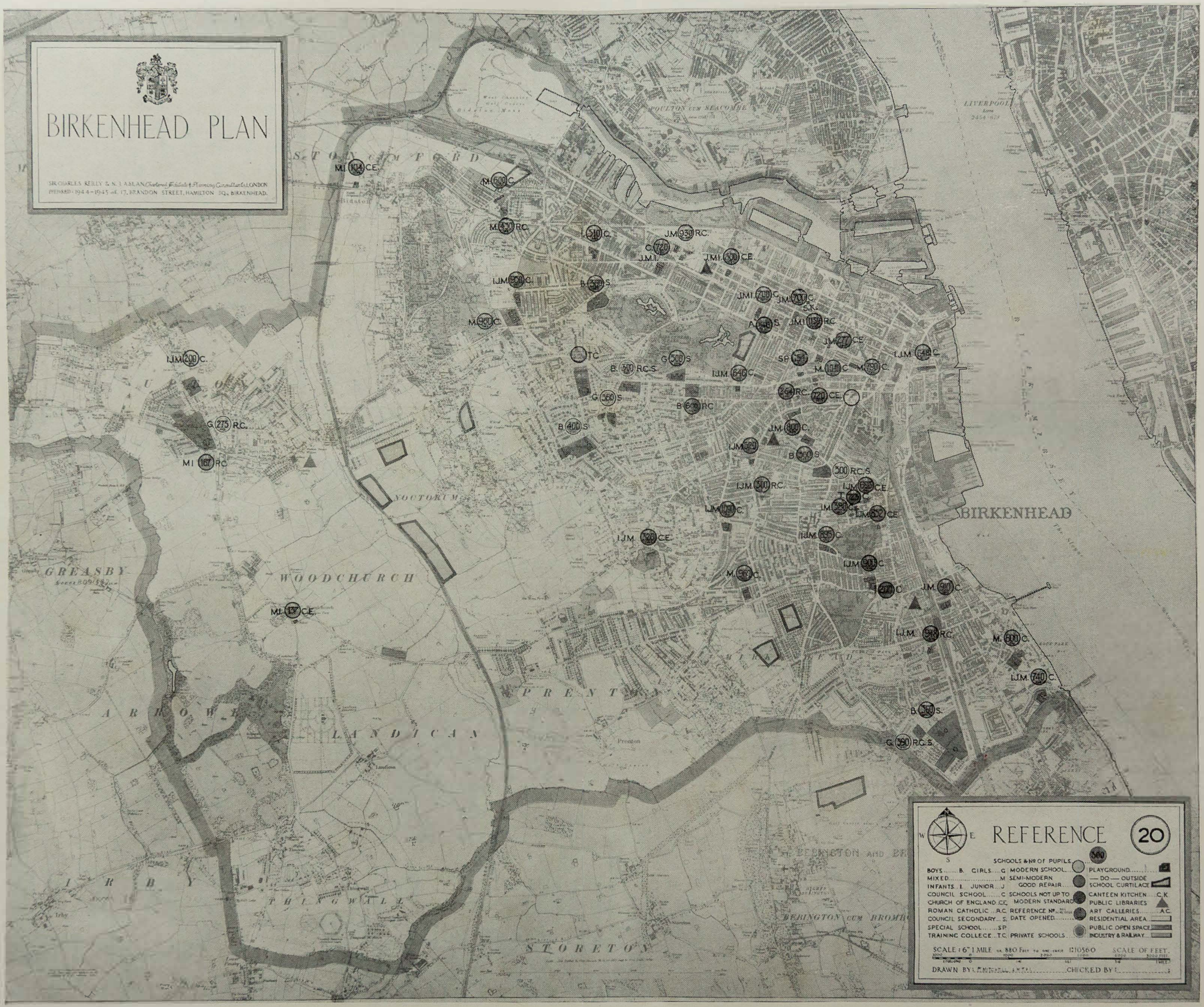
New Educational Buildings

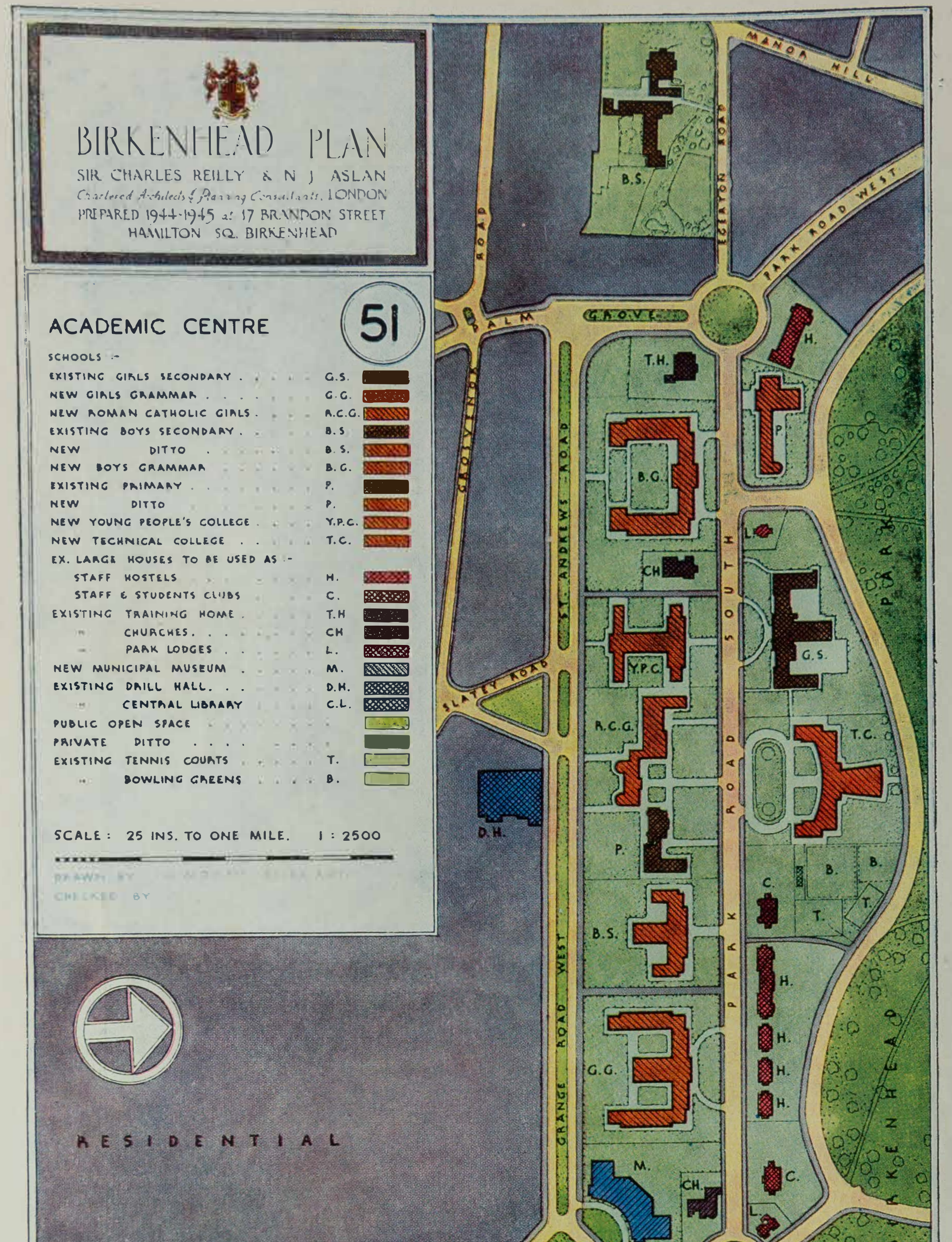
A summary of the various schools required by the new Education system is found in Appendix No. 22 in the Report, but the following new buildings are provided :—

1. Girls' Secondary (Grammar) School, estimated to take about 600 scholars.
2. Roman Catholic Girls' School. This site has already been reserved for a new Central School, but under the new system it will probably have ' Secondary ' status. It is intended that this shall be designed to balance the adjoining existing buildings.
3. Boys' Secondary School, estimated to take only 300-400, as there exist two similar schools within less than a mile.
4. Boys' Secondary (Grammar) School to take at least 600 boys.
5. Primary School to house either 400 junior mixed or infants.
6. Technical College, for about 500 mixed pupils, sited so that the building may be executed without interfering with the existing large houses in front. Later, when these houses are demolished, their sites will form a spacious forecourt and dignified setting for the College.
7. Young People's College, estimated to accommodate at least 400 adolescents of both sexes.

Other Existing Buildings to be retained

1. The block of five large houses, fronting the new Palm Grove-Park Road West roundabouts, is very suitable for conversion into a Teachers' Hostel.
2. The large houses on the north side of Park Road South, between Park Road East and the proposed Technical College, now include several Clubs and a Co-operative Educational Centre. It is suggested that these buildings remain and be converted from Clubs to Staff and Students' Hostels as and when the need arises. Ultimately, at the end of their natural life these houses will be demolished and their sites used for educational purposes in the light of future requirements.


BIRKENHEAD PLAN
SIR CHARLES REILLY & N. J. ASLAN Chartered Architects & Planning Consultants LONDON
PREPARED 1944–1945 at 17, BRANDON STREET, HAMILTON SQ., BIRKENHEAD.
REFERENCE
20
SCHOOLS & No. OF PUPILS
300
BOYS B. GIRLS G
MIXED M
INFANTS I. JUNIOR J
COUNCIL SCHOOL C
CHURCH OF ENGLAND C.E.
ROMAN CATHOLIC R.C.
COUNCIL SECONDARY S.
SPECIAL SCHOOL SP
TRAINING COLLEGE T.C.
MODERN SCHOOL
SEMI-MODERN GOOD REPAIR
SCHOOLS NOT UP TO MODERN STANDARD
REFERENCE No. DATE OPENED
PRIVATE SCHOOLS
PLAYGROUND
— DO — OUTSIDE SCHOOL CURTILAGE
CANTEEN KITCHEN C.K.
PUBLIC LIBRARIES
ART GALLERIES A.G.
RESIDENTIAL AREA
PUBLIC OPEN SPACE
INDUSTRY & RAILWAY
SCALE: 6" 1 MILE or 880 Feet to one inch 1:10560
SCALE OF FEET
DRAWN BY
CHECKED BY
W
E
S
BIRKENHEAD
LIVERPOOL
POULTON CUM SEACOMBE
WOODCHURCH
NOCTORUM
GREASBY
ARROWE
LANDICAN
PRENTON
STORETON
THINGWALL
IRBY
UPTON
BEBINGTON CUM BROMBOROUGH


BIRKENHEAD PLAN
SIR CHARLES REILLY & N J ASLAN
Chartered Architects & Planning Consultants, LONDON
PREPARED 1944-1945 at 17 BRANDON STREET
HAMILTON SQ. BIRKENHEAD
ACADEMIC CENTRE
51
SCHOOLS :-
EXISTING GIRLS SECONDARY . . . G.S.
NEW GIRLS GRAMMAR . . . G.G.
NEW ROMAN CATHOLIC GIRLS . . . R.C.G.
EXISTING BOYS SECONDARY . . . B.S
NEW DITTO . . . B.S.
NEW BOYS GRAMMAR . . . B.G.
EXISTING PRIMARY . . . P.
NEW DITTO . . . P.
NEW YOUNG PEOPLE'S COLLEGE . . . Y.P.C.
NEW TECHNICAL COLLEGE . . . T.C.
EX. LARGE HOUSES TO BE USED AS :-
STAFF HOSTELS . . . H.
STAFF & STUDENTS CLUBS . . . C.
EXISTING TRAINING HOME . . . T.H
" CHURCHES . . . CH
" PARK LODGES . . . L.
NEW MUNICIPAL MUSEUM . . . M.
EXISTING DRILL HALL . . . D.H.
" CENTRAL LIBRARY . . . C.L.
PUBLIC OPEN SPACE
PRIVATE DITTO . . .
EXISTING TENNIS COURTS . . . T.
" BOWLING GREENS . . . B.
SCALE : 25 INS. TO ONE MILE. 1 : 2500
MANOR HILL
EGERTON ROAD
PARK ROAD WEST
GROVE
PALM
GROSVENOR ROAD
ST. ANDREWS ROAD
SLATEY ROAD
PARK ROAD SOUTH
BIRKENHEAD PARK
GRANGE ROAD WEST
PARK ROAD EAST
OXTON ROAD
SHOPPING CENTRE
CLAUGHTON ROAD
BOROUGH ROAD
ATHERTON ST.
EXMOUTH ST.
WHETSTONE LANE
GRANGE ROAD
RESIDENTIAL
RESIDENTIAL
RESIDENTIAL
B.S.
T.H.
H.
B.G.
P.
CH
L.
G.S.
Y.P.C.
R.C.G.
T.C.
D.H.
C.
B.
T.
B.S.
H.
G.G.
M.
CH.
C.
L.
P.
C.L.

THE ACADEMIC CENTRE has been planned as a "precinct"—an area isolated from the noise, bustle and traffic of the town outside it—along Park Road South. This area is eminently suitable for this type of development owing to:—

(a) The several schools already existing in it.

(b) It's central position.

(c) The proximity of Birkenhead Park.

3. Two of the three existing places of worship—the Catholic Apostolic Church and Friends' Meeting House in Park Road South—are retained, with some small adjustment of site boundaries. The third place of worship, the Church of Christ, Alvanley Place, is a temporary building with little architectural value and will have to be removed when the new Park-Library Crescent is set out. A new site for this church is indicated on the plan at the corner of St. Andrew's Road and Palm Grove.
4. Provision is made for the retention of the Training Home at the corner of Park Road South and Palm Grove.
5. The Drill Hall in Grange Road West should remain and will probably be used by many of the students from the Academic Area.
6. The Central Library in Borough Road, at present far too isolated, is linked as it should be to the Academic Centre by a new 100 ft.-wide double-carriageway crescent. This Park-Library Crescent effectively divides the Shopping Centre from the Residential Area and provides for staff and students easy and pleasant access from school to library. Suitable trees and flowering shrubs should be planted in this Crescent to make it a first-class promenade and grand approach to the Park at the north end and to the Library at the south.

Art Gallery and Museum

The Williamson Art Gallery and Museum at the junction of Slatey Road and Balls Road, opened in 1928, is fine architecturally, but badly sited in relation to the main life of the town. Access to it from the new Academic Centre is easy and direct along the improved Slatey Road. In the interests of the fine arts it is suggested that this building should remain purely an Art Gallery and that the Museum section be transferred elsewhere.

Municipal Museum

A suitable site at the corner of Grange Road West and the new Park-Library Crescent has therefore been allotted to a new Municipal Museum. Its prominent position and spacious dignified setting, its proximity to the proposed cultural centre of the Borough and its easy access to the Library ensure that it will be much more widely used and appreciated than is the existing museum off Balls Road.

Sports Facilities and Playing Fields

The existing Council Secondary School for Girls has adequate playing fields in Birkenhead Park off Park Road East. A limited encroachment on the Park for some of the new schools may be permitted and the playing fields already acquired by the Local Education Authority utilised. The existing tennis courts, bowling greens and sports pavilion east of the new Technical College are retained.

Adequate space is allowed round most of the new schools and colleges for such sports facilities as tennis, netball, badminton and fives, but for football, cricket, hockey and similar games, a suitable area is reserved at Noctorum.

Park Road South

This existing 60 ft. road (40 ft. carriageway) carries two bus services and little other traffic except private cars, but more than a thousand scholars walk or cycle along it to school. The total number of children and young people for whom accommodation is provided in the Academic Centre will exceed four thousand and it may be advisable at some future date to divert all traffic along the double-carriageway road to the south (Grange Road West and St. Andrew's Road) and close the existing road to everything except cycles and pedestrians. Otherwise, it will be necessary to provide several 4 ft. wide islands along this road.

Building Lines and Height of Buildings

It is suggested that in Park Road South all new buildings shall conform to a building line 80 ft. (minimum) from the centre of the road. This will allow 50 ft. clear open space in front of every new school and in the central symmetrical group on the south side this may be increased.

The uniform cornice or parapet line, so essential in a street with continuous built-up frontage, is unnecessary in this area. It is suggested that the buildings generally shall not be more than four storeys exclusive of towers or special architectural features. The uniformity of modern educational requirements and accepted planning standards will ensure a fundamental simplicity and similarity of style and, providing yellow bricks and black mortar are prohibited (this should apply to every part of the Borough) no further control is needed.

Overspill

The houses affected by the re-planning of this area, including those remaining for conversion into hostels and clubs, are as follows :—

In the Academic Area	156
Along the new double-carriageway road	59
In the new Park-Library Crescent (one half counted as Shopping Centre)	62
	277

At 4 persons per house this means that about 1,108 persons will be displaced but at least 200 persons will be replaced as caretakers, resident teaching staff and students, leaving an ultimate overspill of 900.

Schedule of Schools and Areas

Gross area of Academic Centre, including one-half the width of surrounding roads and excluding the major part of the Park-Library Crescent	37.04 acres
Area of half of the surrounding roads	9.37 „
Net area of Academic Centre	27.67 „

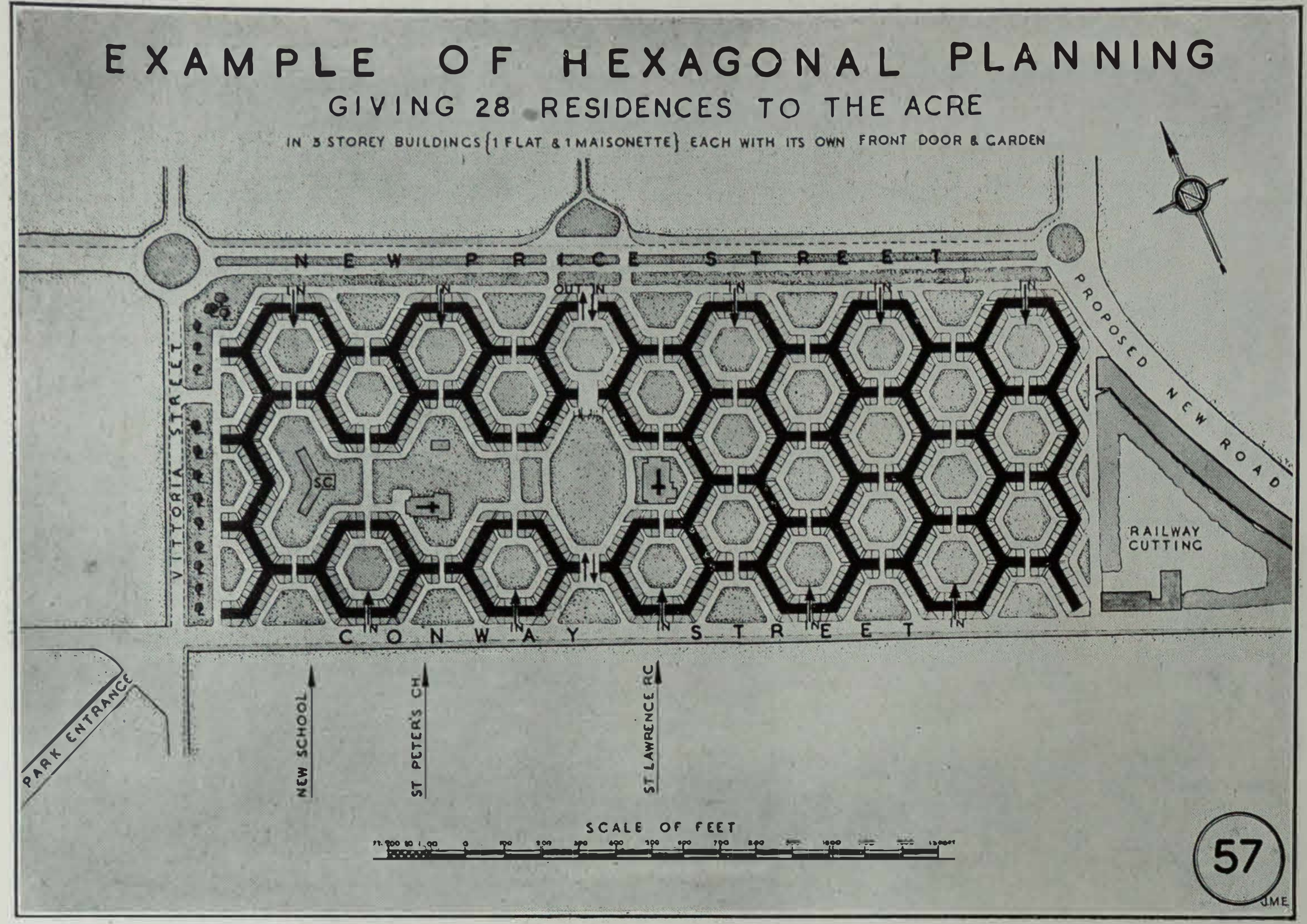
The constitutent areas and percentages are below :—

School	*Scholars*	*Site area*
Existing Girls' Grammar ...	500	2.62 acres
New Girls' Grammar	600 (Estimated)...	2.65 „
New R. C. Girls'	450 (Estimated)...	2.13 „
New Boys' Secondary	400 (Estimated)...	1.91 „
New Boys' Grammar	600 (Estimated)...	2.92 „
Existing R. C. Boys'	600	1.25 „
New Primary	400 (Estimated)...	1.06 „
New Young People's College ...	400 (Estimated)...	1.56 „
New Technical College ...	500 (Estimated)...	2.68 „
		18.78 acres
Other buildings, e.g., Museum, Churches, Hostels, Clubs, etc.		8.89 „
Total net area (excluding roads)		27.67 acres

(E) CENTRAL RESIDENTIAL AREA

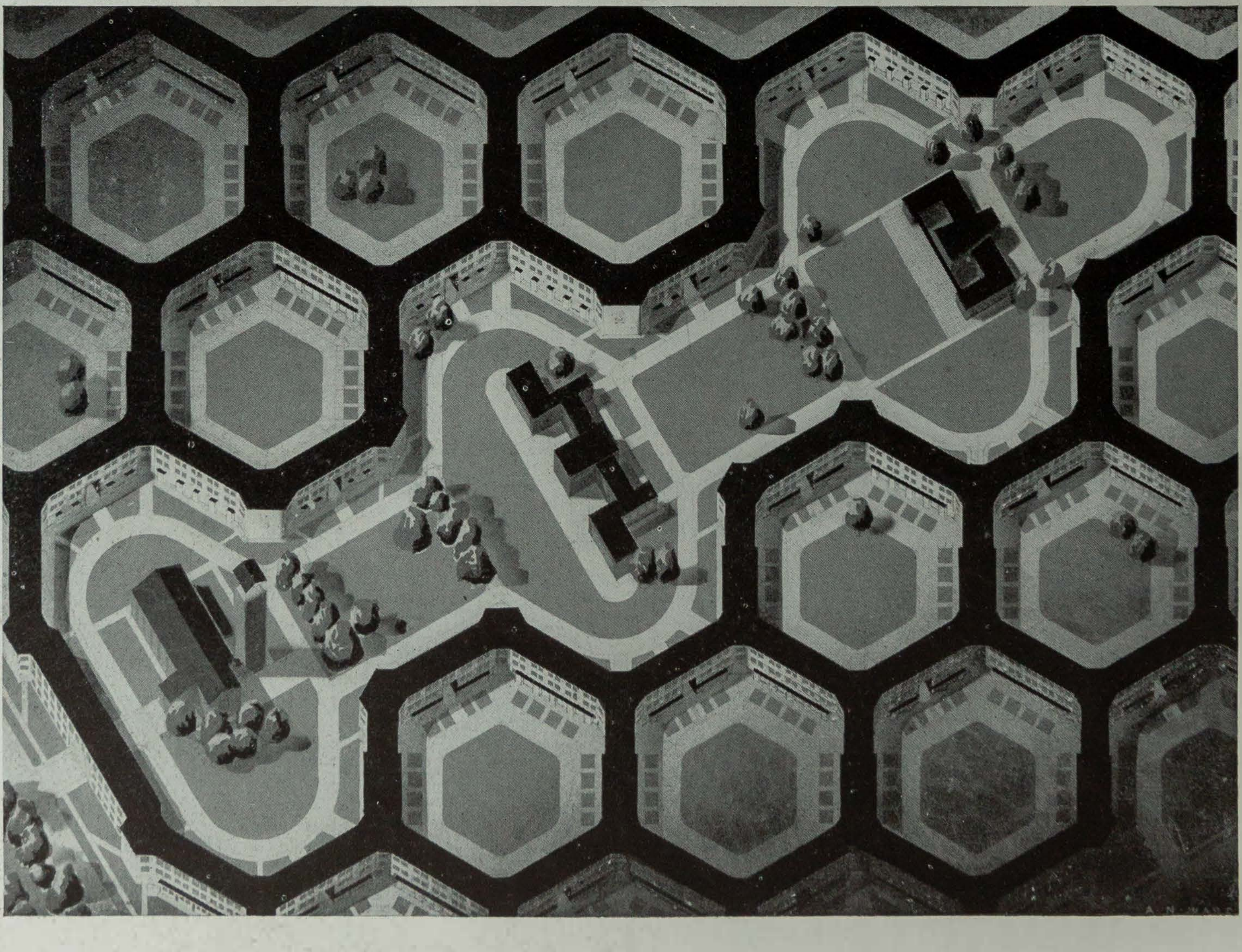
Replanning of the Central Residential Area.

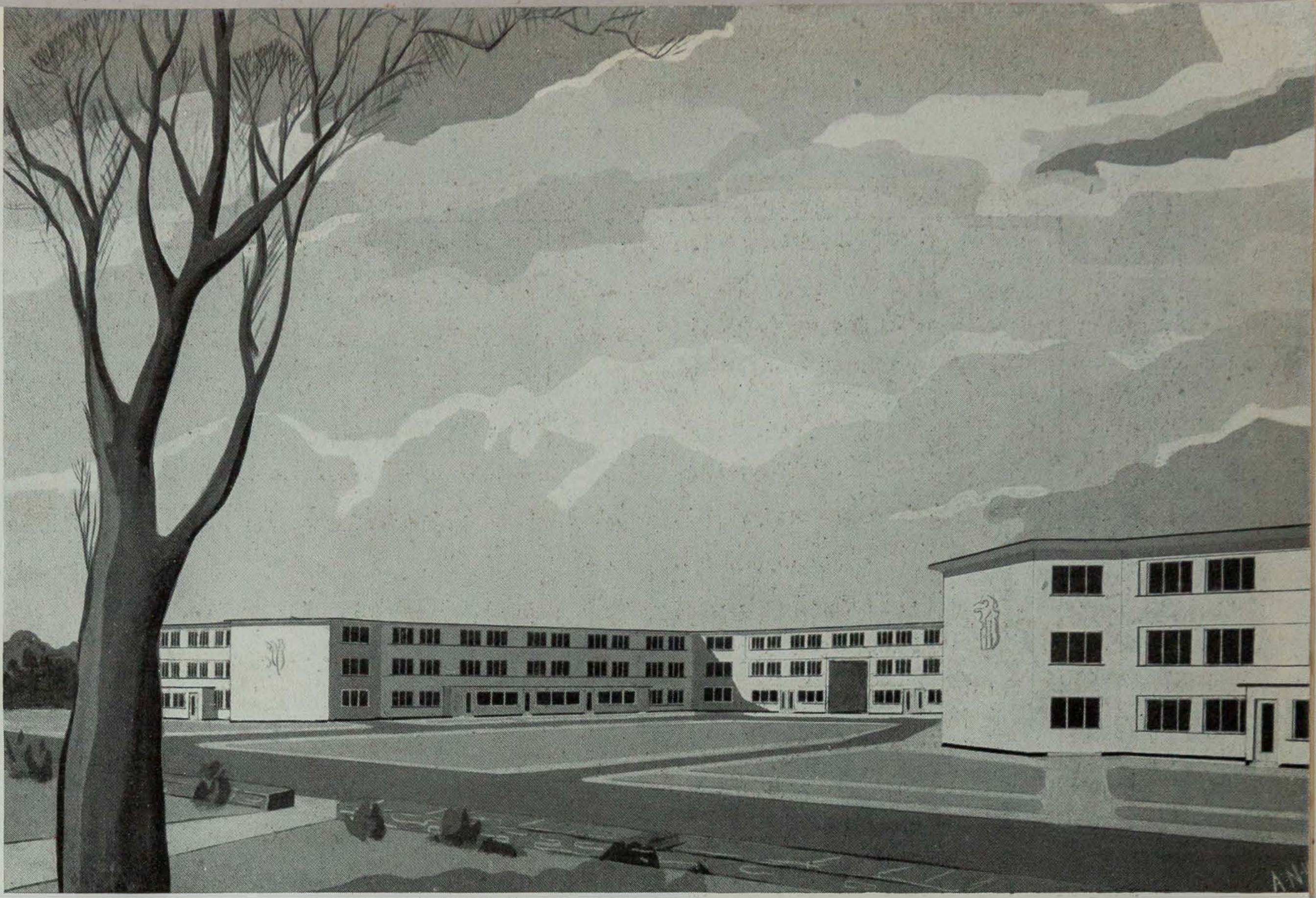
Of the twelve areas which, from the facts shown in the Survey, should be rebuilt within the next twenty-five years, the worst area is that between Conway Street and Price Street. Next to this is the triangular area bounded by Claughton Road, Park Road East,



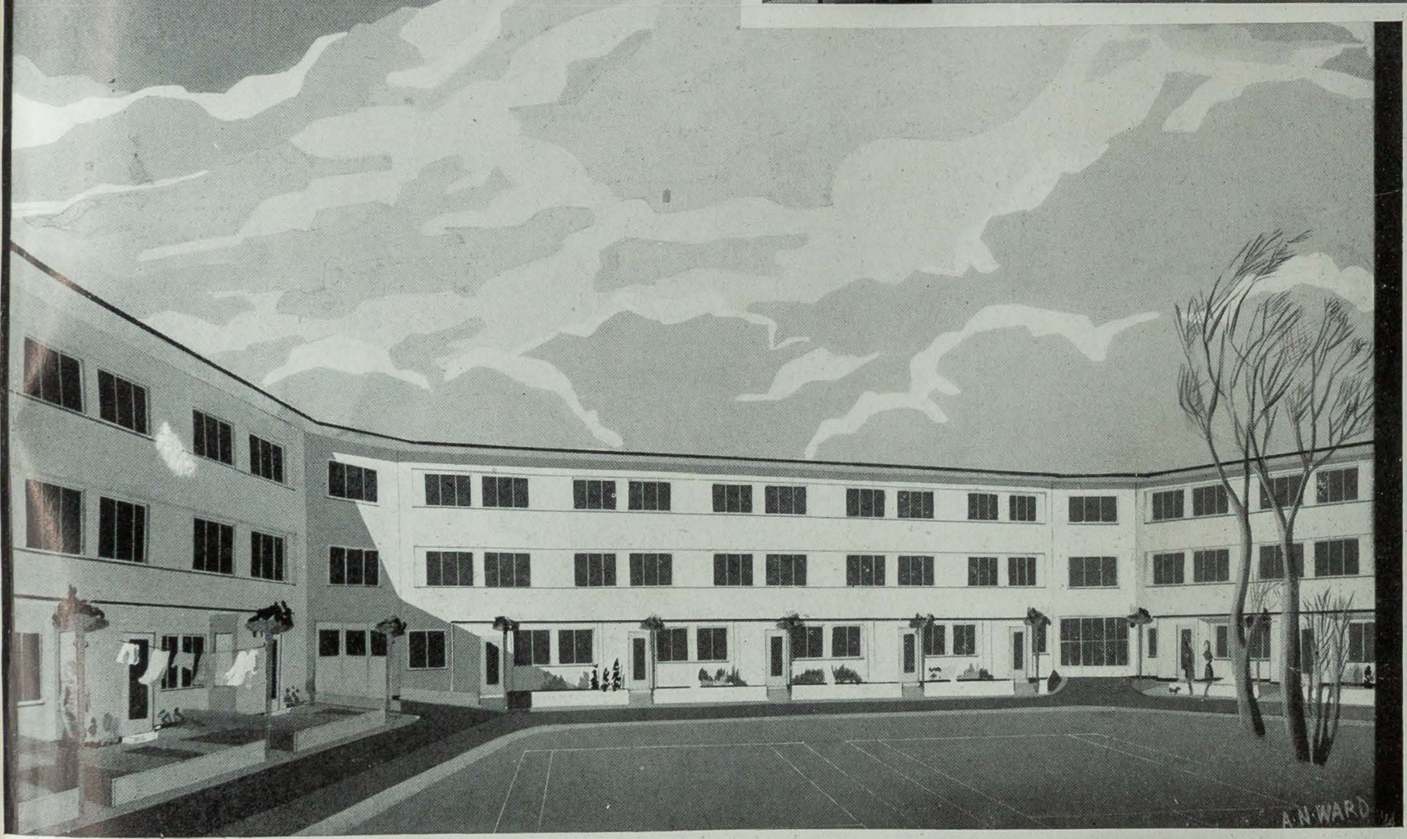
IF THE PRESENT SEWERS AND OTHER SERVICES are in the main disregarded, it is possible by planning the same number of buildings round a series of horizontal courts to restore the old density of 29 houses per acre and yet to provide a garden and front door to each residence and have a large open space for common use.

BIRD'S EYE VIEW OF HEXAGON. The hexagonal plan would afford, (*a*) the assurance of sunlight to the maximum number of windows, (*b*) the pleasure of living in a large architecturally shaped court, 250 feet across and easily large enough to enclose the existing Town Hall, (*c*) the secluded neighbourliness typical of the Inns of Court and the Oxford and Cambridge Colleges.

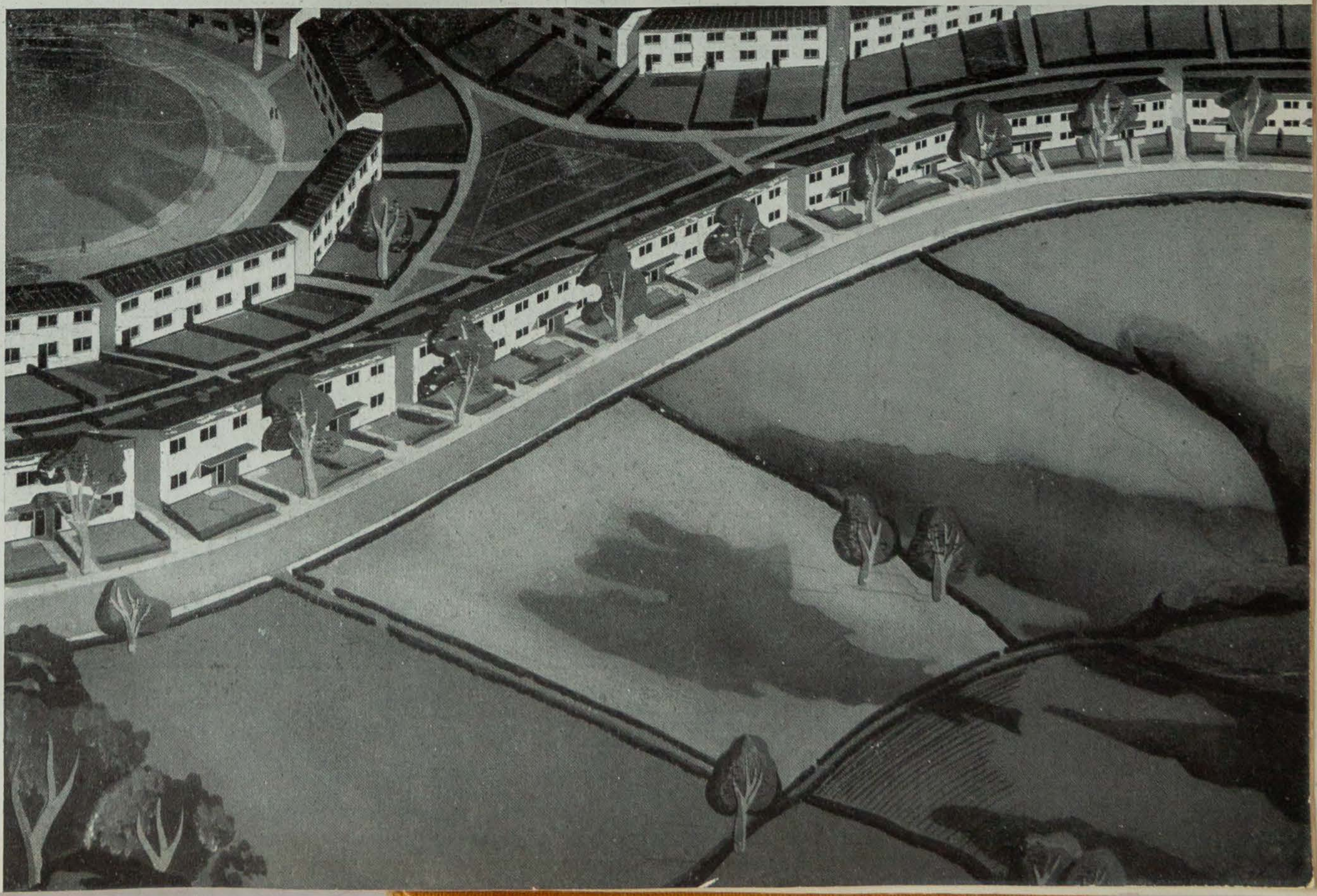




PERSPECTIVE OF ENDS OF HEXAGON. Maisonettes are not all of the same size. Those near the carriage entrances have two extra bedrooms over them. Those at the six corners are larger still.

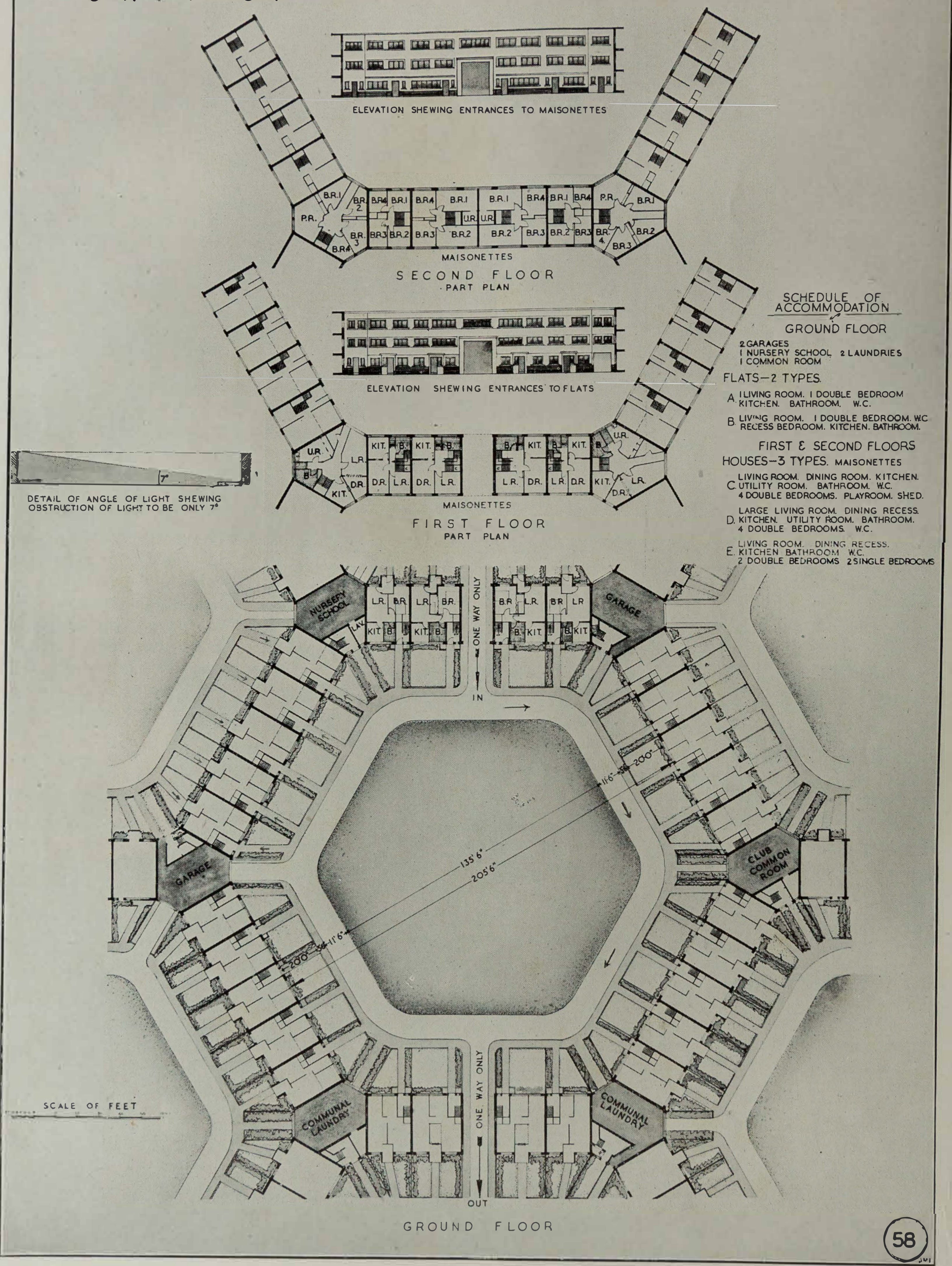


PERSPECTIVE OF HEXAGON. The large communal grass space in the middle of each court is big enough for a fine group of trees in the centre, or for two full-sized tennis courts with room to spare. The hexagonal plan could thus raise materially the standard of urban living, and there would be no overspill of population to be housed elsewhere.



THE NEW CITY WALL, defining and protecting both town and country.

UNIT OF HEXAGONAL LAYOUT



SCHEDULE OF ACCOMMODATION

GROUND FLOOR

2 GARAGES
1 NURSERY SCHOOL 2 LAUNDRIES
1 COMMON ROOM

FLATS—2 TYPES.

A. 1 LIVING ROOM. 1 DOUBLE BEDROOM KITCHEN. BATHROOM. W.C.

B. LIVING ROOM. 1 DOUBLE BEDROOM. W.C RECESS BEDROOM. KITCHEN. BATHROOM.

FIRST & SECOND FLOORS

HOUSES—3 TYPES. MAISONETTES

C. LIVING ROOM. DINING ROOM. KITCHEN. UTILITY ROOM. BATHROOM. W.C. 4 DOUBLE BEDROOMS. PLAYROOM. SHED.

D. LARGE LIVING ROOM. DINING RECESS. KITCHEN. UTILITY ROOM. BATHROOM. 4 DOUBLE BEDROOMS. W.C.

E. LIVING ROOM. DINING RECESS. KITCHEN BATHROOM W.C. 2 DOUBLE BEDROOMS 2 SINGLE BEDROOMS and Conway Street. These two areas have therefore been taken together and replanned in detail as an example. They form together a Neighbourhood Unit.

Houses versus Flats

It is almost a necessity that drives dock workers to live near their work. Many of those engaged in the dockland industrial area north of Price Street also wish to live at hand. Such a desire is quite reasonable today with our modern, clean, electrically-driven factories. It is clearly sound policy, therefore, to get back as many residences on to the site as possible, provided there are open spaces and a sufficiency of private gardens. Blocks of flats would be the easiest way to get the required population on to the site, but blocks of flats are not suited to family life with young children. Each flat cannot have its own garden adjacent to it however small. There is, too, a great, if rather irrational, dislike to flats in this part of England, which may perhaps in part be traced to the feeling that a flat is not an individual home with its own front door. How then is it possible to provide front doors and individual gardens and proper open spaces, and yet get a fairly high density of population ?

Solution

Our suggestion is that it can be got by buildings three storeys high, of which the ground floor is a flat of three rooms for bachelors, old people or couples with one child. The flat is approached through its own garden and front door on one side of the building and a maisonette of seven rooms on the first and second floors is approached through its garden and front door on the other side. With this type of building, arranged in terraces round rectangular open green spaces, it has been found possible to replan this area at a density of 23 residences to the acre. The criss-cross of streets of small houses which exists in the area today has 29 residences to the acre, including roads, but with no open spaces for recreation and fresh air beyond the roads and a few largely inacessible school playgrounds. The houses, too, have yards and not gardens, and if the yards were used as gardens they would be too closely built-in for anything to grow in them. By placing the buildings round open greens it is thought that the friendliness, so characteristic of streets of little houses, may be preserved and even enhanced. The windows of the flats and maisonettes will look at one another across the gardens and the green, and very soon everyone can and should get to know everyone else, if they want to. The children playing on the green will ensure that. They will also play there in safety and under the eyes of their mothers.

Amenities and Services

Churches and schools have been preserved, and, where they already exist, modern blocks of flats. Community buildings are so placed that they command the community, and are not just an accident in it. The shopping centre, schools, nursery schools, public baths and washhouses and communal laundries and garages, the clubs, libraries, hotels and public-houses are also, it is thought, conveniently spaced and without overcrowding. This scheme follows the lines of existing streets, sewers, and other public services, and to that extent should cost less than one that does not accommodate itself in this way. An Appendix No. 12 gives full details of this area as existing and as proposed.

(F) ALTERNATIVE HEXAGONAL METHOD

An Alternative Hexagonal Method of Planning the Area

If the present sewers and other services are in the main disregarded, it is possible by planning the same buildings as a series of hexagonal courts to restore the old density of 29 houses to the acre, and yet to provide both a garden and front door to each residence and still have a large open space for common use. Part of the area has been replanned in this way. (See Drawings pages 88 to 90).

The further advantages of this type of planning, which is adaptable to any level area, are :—

(1) The pleasure of living in a large architecturally shaped court 205 ft. across, which is big enough to enclose the present Birkenhead Town Hall with space to spare.

(2) The angle from the bottom of the lowest windows in each court over the opposite building is only seven degrees with the horizontal, which means the lowest windows get more than 83 degrees of sky, and those higher get more still. The hexagon too, is the best shape of court to give sunlight to the maximum number of windows. By making all the living rooms stretch from one hexagonal court to another this is still further ensured.

(3) The 28 ground floor flats and the 34 maisonettes provide 62 residences to each court, all facing one another, and are enough to make a pleasant community, neither too big nor too small.

(4) Each hexagon provides at the corners six large rooms for garages, nurseries, club rooms, and laundries.

(5) The maisonettes are not all of one size. Those next the carriage entrances have two extra bedrooms over them, while those at the six corners are larger still. It is suggested that in one of these latter maisonettes an elected warden might live with his windows overlooking three courts. These six maisonettes however above the corner rooms have no private gardens.

(6) The large communal grass space in the centre of each court is big enough for a fine group of trees in the centre, or for two full size tennis courts with ample run at back and sides. This latter is mentioned mainly to show the size. Some courts could well be given to bowls, others to children's playgrounds. With grass, the courts are large enough and the buildings low enough to keep down the noise of children playing. As proved at Plymouth, the grass mowings with suitable drying apparatus can be made a source of revenue.

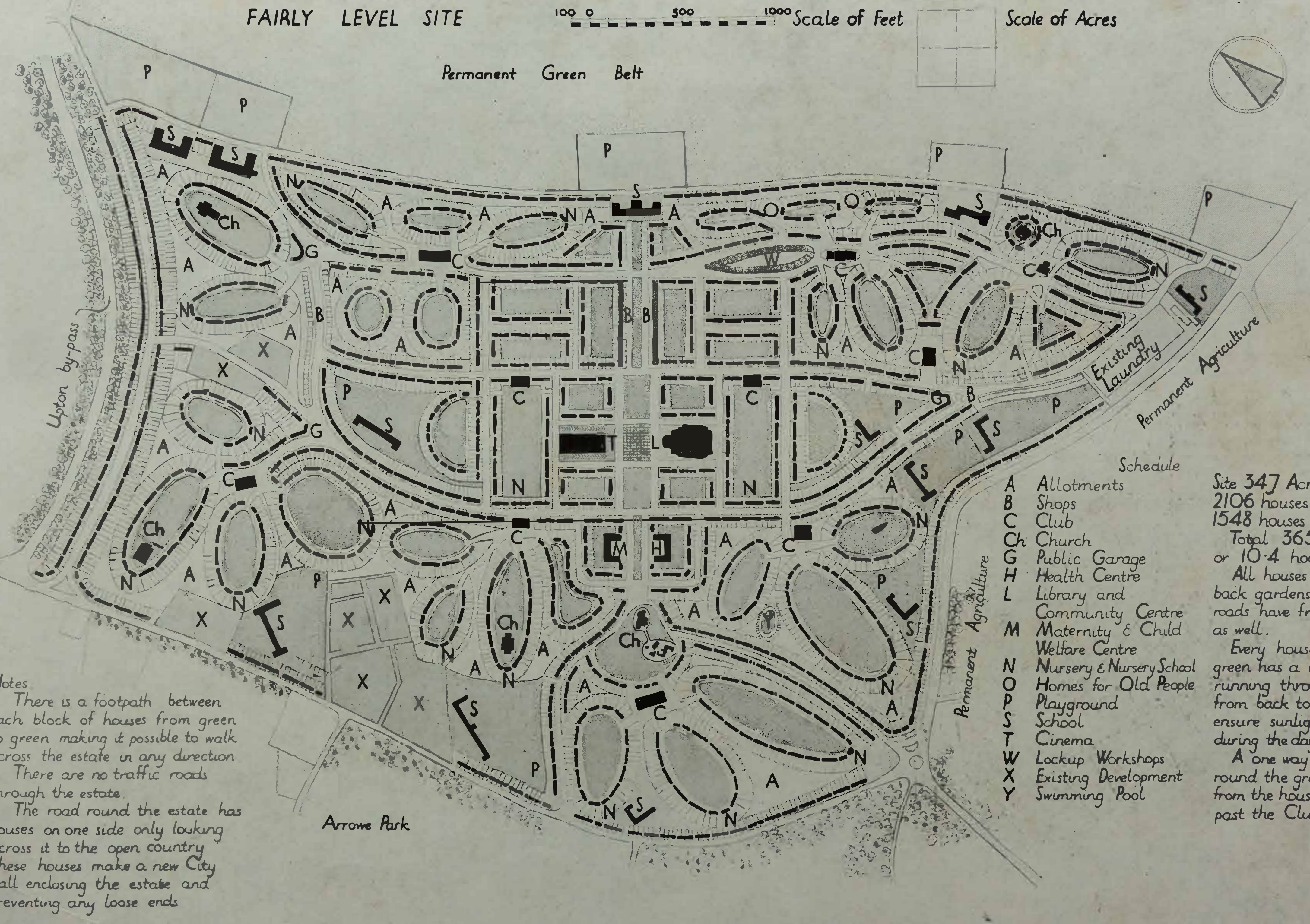
(7) In order that each tenant may hang out washing in the open air on Monday, a concrete post with hook is placed at the end of each garden to which a line could be attached and taken to a hook in the house wall. The reinforcement of these concrete posts could well be a copper tube which could supply water to the vases they carry. In this way flowers could be grown out of reach of the children and watered regularly by merely turning on a tap. The range of these vases full of flowers, seen against the colour washed walls, will outline the shape of the courts, and give a charming effect. These posts, too, could act as lamp posts with lights under the vases. We suggest that these hexagonal courts with their interesting shape, their gardens and communal lawns and trees, decorated as suggested, and with the six large communal rooms for different purposes, will raise very much the standard of urban living for those for whom they are designed, and at little extra cost.

In spite of the amenities detailed above, there is with this scheme no over-spill of population to be housed elsewhere.

(G) A RURAL AREA

In replanning a rural area as an example we have chosen the Woodchurch area, enlarged to Arrowe Park to take the estimated overspill of 10,000 plus some 4,000 new people (see Merseyside Report). We have chosen it for two reasons, in spite of the fact that another plan for part of this area has recently been adopted; first, because in another connection we had already given a good deal of thought to the greater part of this area and, secondly, because being open farm land and fairly level, it has permitted us to show in it what we would suggest

DIAGRAM OF "VILLAGE GREEN" PLAN FOR DORMITORY SATELLITE TOWN NEAR BIRKENHEAD OF 14,000 INHABITANTS, APPLICABLE IN IDEA TO ANY HOUSING DEVELOPMENT ON A FAIRLY LEVEL SITE



Schedule

A	Allotments
B	Shops
C	Club
Ch	Church
G	Public Garage
H	Health Centre
L	Library and Community Centre
M	Maternity & Child Welfare Centre
N	Nursery & Nursery School
O	Homes for Old People
P	Playground
S	School
T	Cinema
W	Lockup Workshops
X	Existing Development
Y	Swimming Pool

Notes

Site 347 Acres
2106 houses on greens
1548 houses on roads
Total 3654 houses
or 10·4 houses per Acre

All houses have private back gardens, those on roads have front gardens as well.

Every house round a green has a living room running through the house from back to front to ensure sunlight sometime during the day.

A one way track runs round the greens, 20 feet from the houses and leading past the Club in every case.

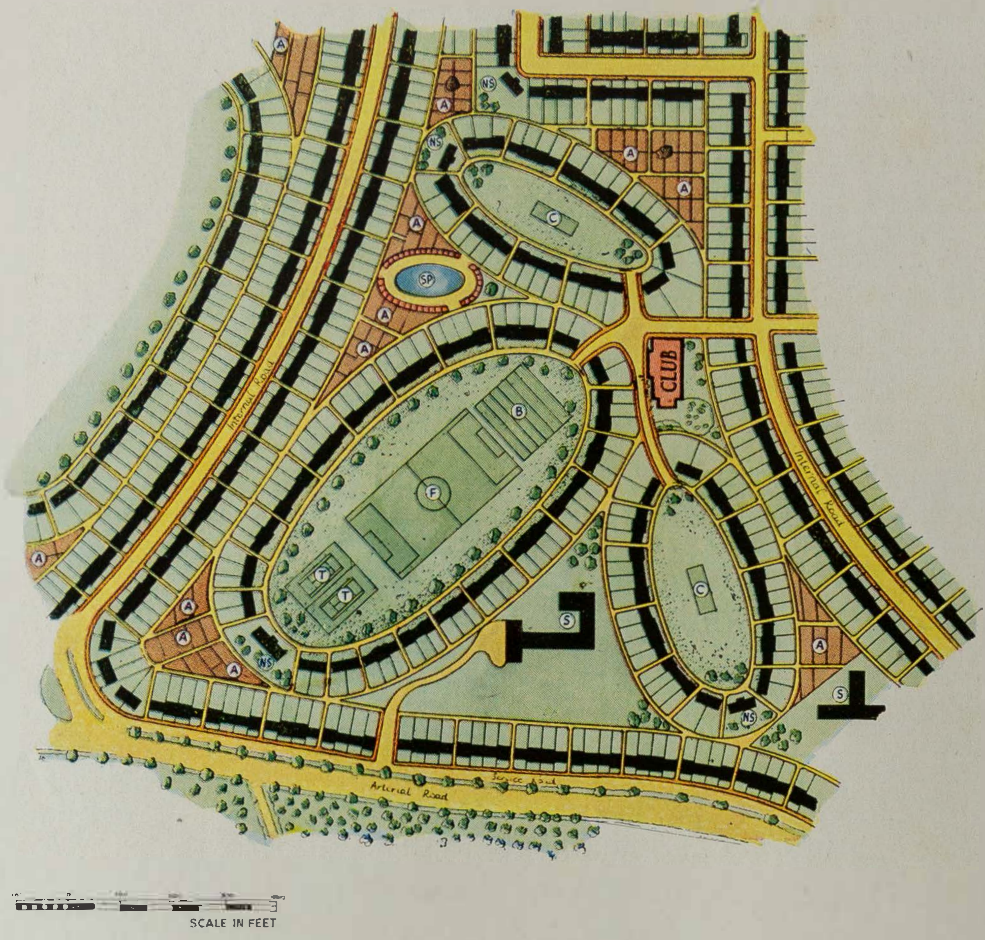
Notes.

There is a footpath between each block of houses from green to green making it possible to walk across the estate in any direction.

There are no traffic roads through the estate.

The road round the estate has houses on one side only looking across it to the open country. These houses make a new City wall enclosing the estate and preventing any loose ends.

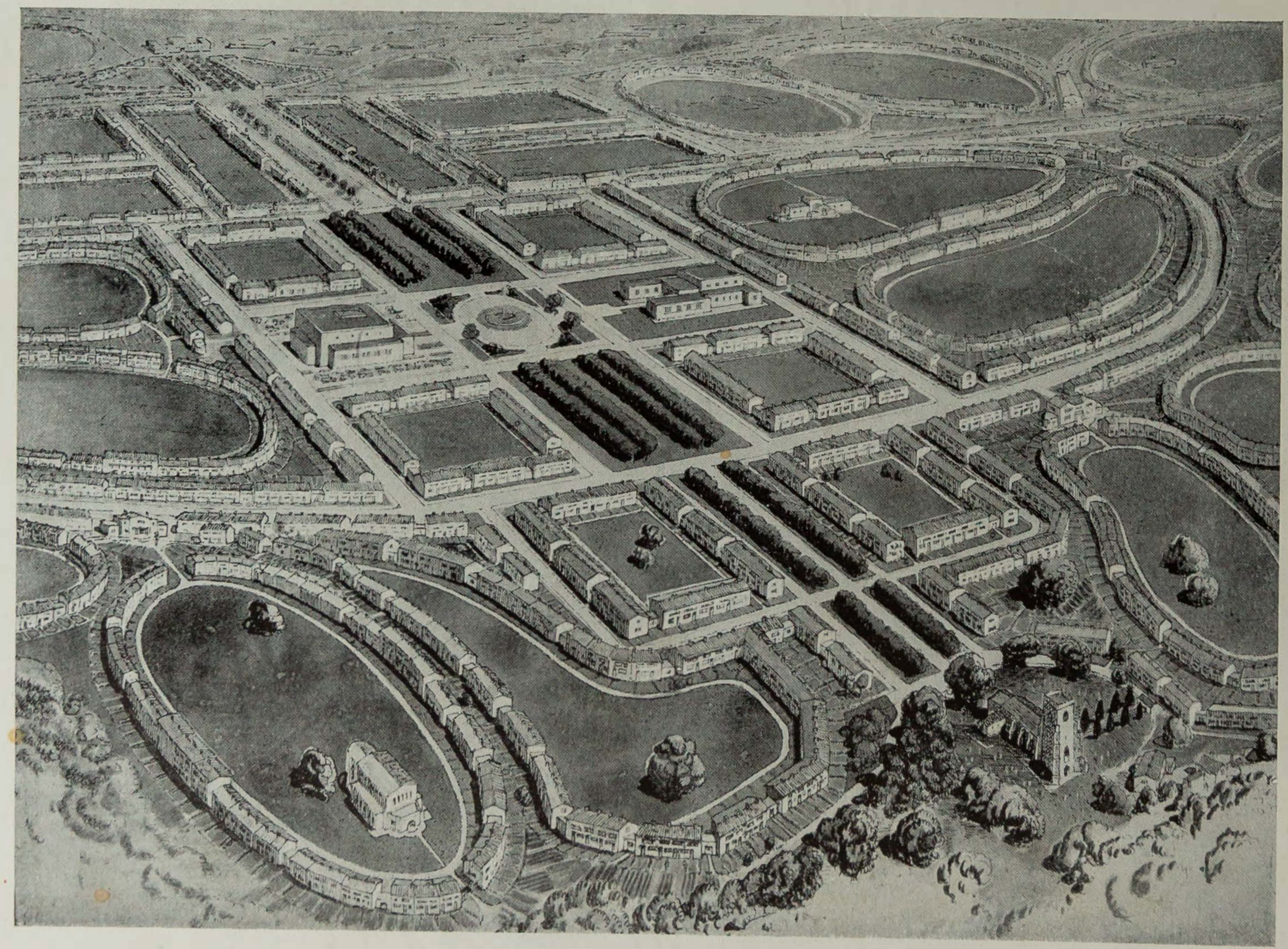
62



DETAILS OF THREE GREENS AND ADJACENT ROADS. A number of interesting advantages are claimed for this type of community planning.

(63)

BIRD'S EYE VIEW of estate planned on village green lines.



for any typical area in the way of lay-out. Small areas may not permit the central squared greens, but the other greens arranged round the Community Centre like petals round the centre of a flower are applicable to any area, singly or in numbers.

The Government in its publications, and especially in its one on Community Centres, has clearly envisaged the new areas of our towns (as well as sections of the old) being considered in future as communities great or small, but always with some basic connection through a club. The mere planting of such a club in an area does not, however, seem sufficient to us. It would be but one more sectional interest. If, however, the roads can be made to lead to it, a different state of affairs at once develops. The Community Centre then takes on some of the functions of the old village inn and becomes the natural centre and meeting place, while the greens in themselves with the houses facing one another form new centres.

From this latter fact of the houses facing one another many new advantages arise. One can live in an ordinary straight or curved road for a dozen years, particularly when the front gardens are cut off with hedges, and not know half-a-dozen people; on the other hand the people from the little streets have not only learnt to know one another, but to be kind and helpful in emergencies. It is obviously necessary that this good community quality should be preserved. The greens do this because the children playing in safety on them ensure the parents knowing each other. We therefore suggest that in all new areas the Corporation should adopt where possible the village green, traditional in this country up to the Industrial Revolution, instead of the street. There will probably be for sometime yet a number of people who like to keep themselves to themselves, and prefer to dwell behind their privet hedges. For them we suggest the roads leading from one group of greens to another give ample scope. In the Plan shown the site covers 347 acres, and there are on it 2,106 houses on greens or squares and 1,548 houses on roads, making a total of 3,654 or 10.4 to the acre.

We suggest that the following advantages also accrue from the Village Green Plan:

(1) The children play in safety and in the eyes of their mothers on greens which are really extensions of the houses. The path shown round the greens is for one way traffic only, the butcher boy's bicycle, the coal cart and that sort of thing.

(2) The houses round the greens, which are themselves not of formal shape, or the terraces of them need not all be of the same size. Indeed they will look better and less formal with some larger ones at intervals. None need however have curved fronts, so that no curved building work is required. It would probably be better and cheaper to build most in terraces of three, four or five according to the curves. Some could of course be single houses with gardens on all sides. All, however, would have back gardens. Beyond these gardens, for the keen cultivators, are allotments in the position near the houses where they are most valuable. These latter fill up the triangular-shaped spaces between the greens.

(3) With a series of greens maintained by a committee of tenants, as we suggest too should be the case with the Community Centre, interest will be taken in the various spaces and pitches arranged for tennis, bowls, cricket and football and one green or group of greens will play another. In this way the team spirit, so long claimed as the perquisite of the public schools, will be developed. As, too, in the Plymouth parks, the mowings can be a source of revenue.

(4) The greens should have 30-60 houses round them, the larger greens having a nursery school and nursery at the opposite end to the Community Centre. Between

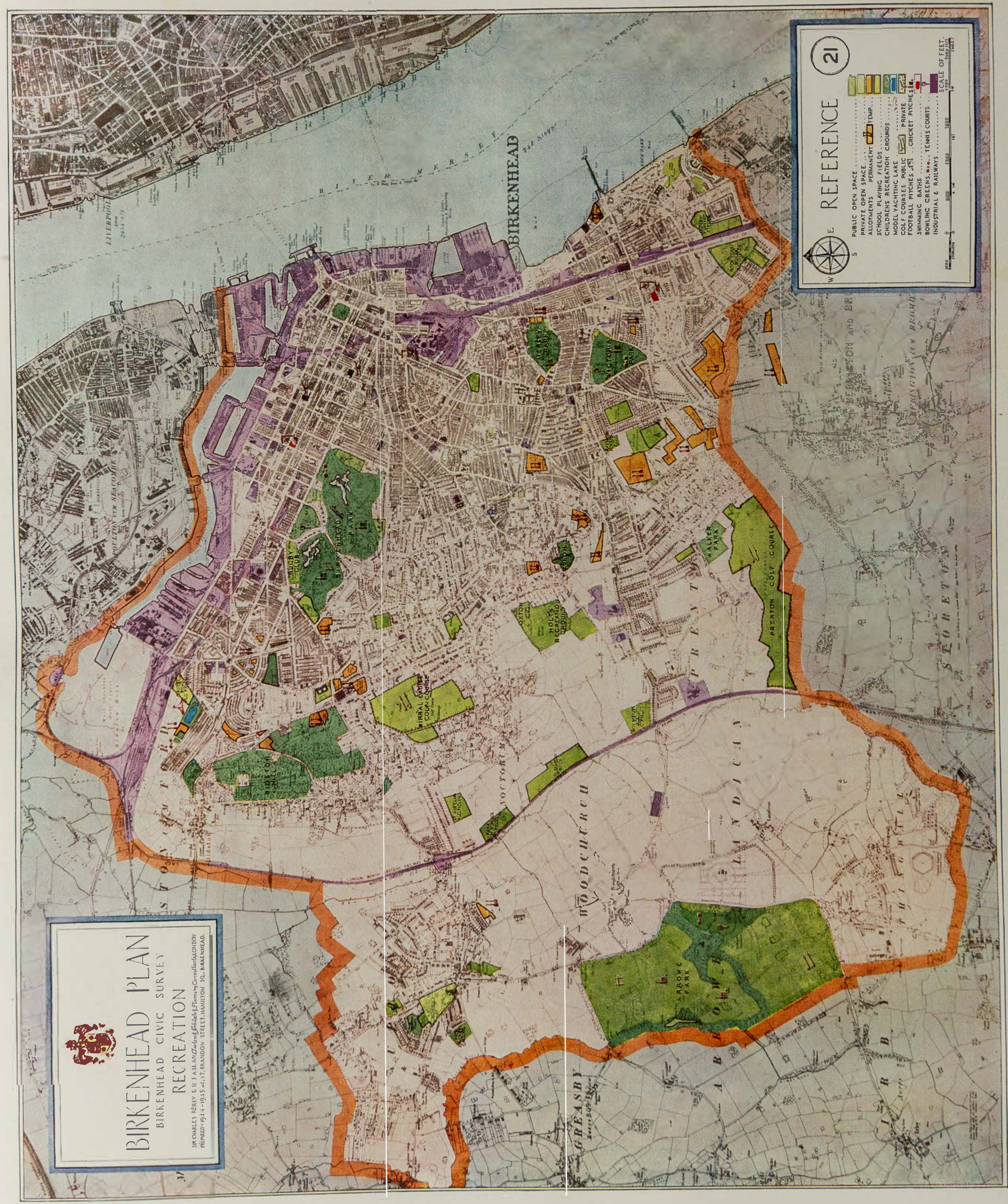
each block of houses and at the back of the gardens are paths enabling one to walk anywhere across the estate in any direction.

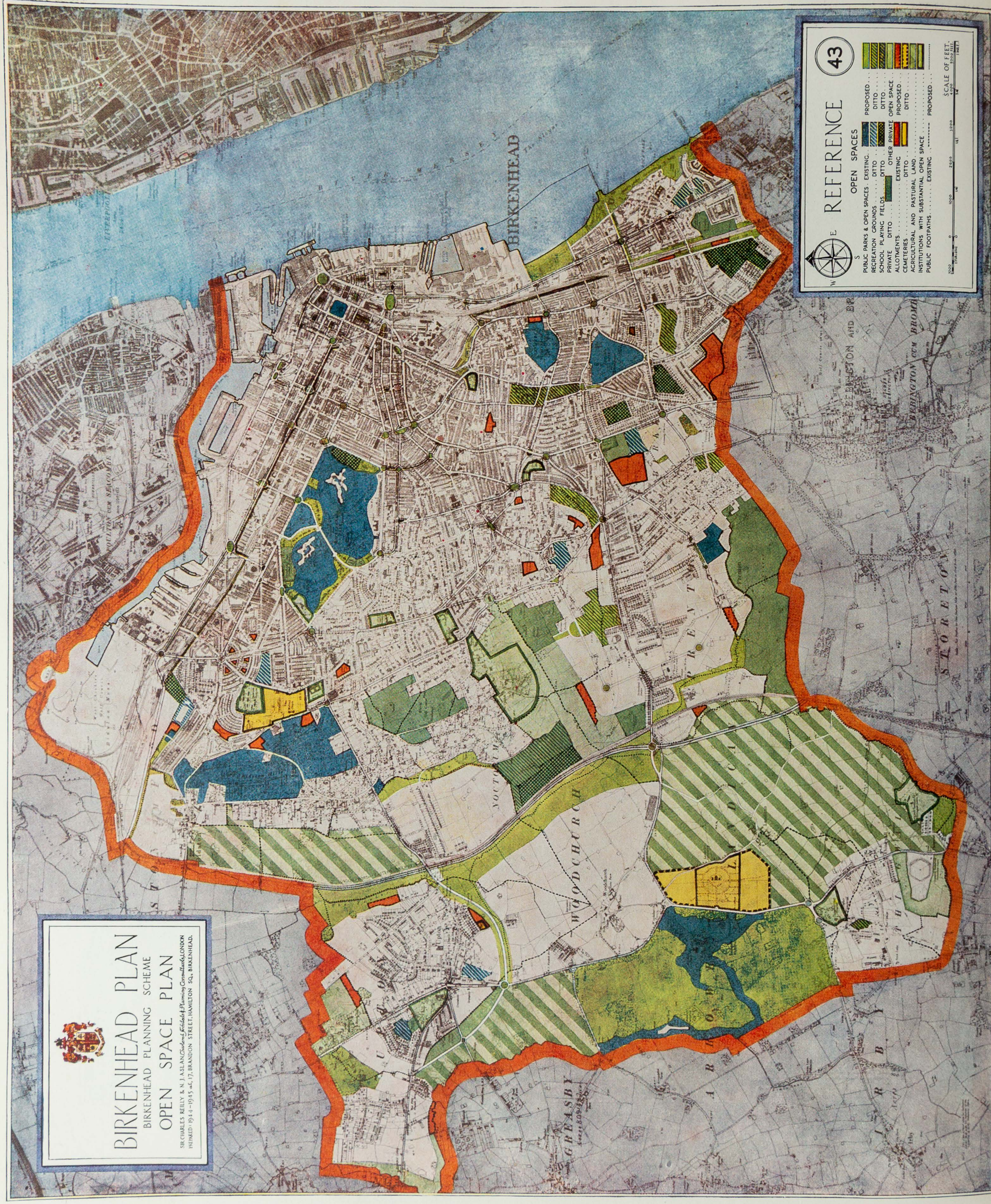
(5) With the houses nearer together than in the ordinary estate planning, both district heating from a central point and the collection of rubbish by suction (as in a thousand flats in Leeds) become things to be discussed.

(6) A possible extension of the Community Centre service is that it should serve meals both in the club and by hot containers sent round the greens, as took place in Vienna and Budapest before the war from hotels and restaurants, the plates being returned for washing up. If this takes place all can have the services of a professional cook.

For further uses of this village green type of community planning see " The Reilly Plan, a New Way of Life" by Lawrence Wolfe, published by Messrs. Nicholson and Watson, at 6*s*. net.

We suggest that all new areas built by the Council be treated as complete in themselves and surrounded by open belts of unbuilt-over agricultural land separating them from a similar area. Surrounding each such area should be a road with houses on one side only looking out across the road and the green belt. This range of houses then becomes a new city wall, not only protecting the town so that prying eyes do not see the backs and sides of houses as at present, but also protecting the country. Town and Country end on a line enhancing instead of interfering with one another. This excellent state of affairs can be seen in many Dutch towns including Hilversum. If such a policy had been adopted in the recent past, Wirral would not have suffered as it has.

BIRKENHEAD PLAN
BIRKENHEAD CIVIC SURVEY
RECREATION
SIR CHARLES REILLY & N J ASLAN Consultant Architects & Planning Consultants LONDON
PREPARED 1944–1945 at 17, BRANDON STREET, HAMILTON SQ., BIRKENHEAD.
REFERENCE
21
N
S
E
W
PUBLIC OPEN SPACE
PRIVATE OPEN SPACE
ALLOTMENTS PERMANENT TEMP.
SCHOOL PLAYING FIELDS
CHILDRENS RECREATION GROUNDS
MODEL YACHTING LAKE
GOLF COURSES PUBLIC PRIVATE
FOOTBALL PITCHES CRICKET PITCHES
SWIMMING BATHS
BOWLING GREENS TENNIS COURTS
INDUSTRIAL & RAILWAYS
SCALE OF FEET.
LIVERPOOL
RIVER MERSEY
BIRKENHEAD
PRENTON
PRENTON GOLF COURSE
LANDICAN
WOODCHURCH
ARROWE PARK
GREASBY
THINGWALL


BIRKENHEAD PLAN
BIRKENHEAD PLANNING SCHEME
OPEN SPACE PLAN
SIR CHARLES REILLY & N. J. ASLAN, Chartered Architects & Planning Consultants, LONDON
PREPARED: 1944–1945 at, 17, BRANDON STREET, HAMILTON SQ., BIRKENHEAD.
REFERENCE
43
W E S
OPEN SPACES
PUBLIC PARKS & OPEN SPACES . EXISTING . PROPOSED
RECREATION GROUNDS . DITTO . DITTO
SCHOOL PLAYING FIELDS . DITTO . DITTO
PRIVATE DITTO . OTHER PRIVATE OPEN SPACE
ALLOTMENTS . EXISTING . PROPOSED
CEMETERIES . DITTO . DITTO
AGRICULTURAL AND PASTURAL LAND
INSTITUTIONS WITH SUBSTANTIAL OPEN SPACE
PUBLIC FOOTPATHS . EXISTING . PROPOSED
SCALE OF FEET.
1000 0 1000 2000 3000 4000 5000 FEET.
BIRKENHEAD
LIVERPOOL
RIVER MERSEY
GREASBY
STORETON
WOODCHURCH
BEBINGTON AND BROMBOROUGH

Section Eight

PARKS AND OPEN SPACES

THE HISTORY OF BIRKENHEAD shows that the provision of parks and open spaces has always been considered a normal part of urban development. During the rapid period of growth since 1840 the town has been very well provided with these facilities compared with many other English towns of similar size. Nevertheless there is some deficiency in certain directions and maldistribution according to the modern standards which are being adopted throughout the country.

The structure and geographical position of the Borough, similar to that of many coastal towns, must be borne in mind in any consideration of provision to be made for open space. Stretches of delightful countryside in Wirral are within twenty minutes bus or cycle journey from Woodside, and some of this is still unspoiled and fairly well provided with footpaths and other amenities.

Standards of Open Space

It is proposed that the normal standard of 7 acres per 1,000 persons, exclusive of school playing fields, cemeteries and agricultural land, should be adopted as the desirable minimum. The area usually suggested for school playing fields is 2½-3 acres per 1,000 persons.

At least half of the allowance of 7 acres should be devoted to recreation and playing fields (the National Playing Fields Association suggest 4 acres per 1,000 persons). The other 3½ acres should be devoted to parks, parkway strips and smaller amenity open spaces, riverside gardens and allotments.

While these standards should apply to the area within the borough boundary as a whole, an attempt has been made to provide each neighbourhood unit with its due proportion of open space. This is difficult in the inner zone, but the object is more easily attainable in the intermediate and outer units. Over the whole area of the borough the ratio between open space and population works out at more than 10 acres per 1,000 persons.

The standard suggested for school playing fields, 2½-3 acres per 1,000 residents, should include facilities for three major groups of children as follows :—

(*a*) 3 to 5 years. Should, where possible, have land adjacent to the houses. Where that is not possible it should be in parks, on local greens, or specially designed playgrounds of ¼-acre each, so planned that no child has to walk across a main road or more than ¼-mile for play.

(*b*) 5 to 11 years. Infant and Junior School playgrounds ½ to ¼ an acre each.

(*c*) 11 to 15 years. Secondary School playgrounds and fields.

(Children's playgrounds away from the house should be hard surfaced with a non-slip finish for use after wet weather and floodlit where possible).

In practice the local greens in the residential units will serve not only for amenity but also for informal play for small children of all ages. As housing redevelopment proceeds there will be therefore, a decreasing need of special playgrounds for the lowest age groups. The provision of playgrounds for the 5-11 age group must be combined and co-ordinated with proposals for the extensive new series of schools which should soon develop.

Allotments

Assuming that one-half the war-time allotment holders will maintain their enthusiasm, one standard allotment of 300 square yards will be required for every 13 householders to meet the overall need of Birkenhead. According to this approximate standard 120-140 acres of land would have to be allocated.

Public Parks and Open Spaces

Four existing public parks—Birkenhead Park (1847 : 126 acres), Mersey Park (1885 : 21 acres), Victoria Park (1901 : 29 acres) and Arrowe Park* (1927 : 425 acres), form a nucleus of 601 acres or 7.58 per cent. of the area of the borough and provide slightly more than 4 acres per 1,000 persons. Birkenhead Park loses much of its potential attractiveness owing to the ill-considered residential encroachments permitted in the past. It is therefore, suggested, that the sites of all private houses, as the buildings complete their natural life, be purchased by the Corporation and added to the Park as public open space or school playing fields. These four parks are not very well distributed in relation to each other and the town as a whole (there is a 2¼ mile gap between Arrowe Park and the other three) but they are supplemented by other public open spaces, e.g. Hamilton Square (4 acres), Bidston Hill (136 acres), Arno Hill (7 acres) and Walker Park (11 acres).

More than 100 acres of land are allocated in the plan as new public open space spread over the town on sites accessible to residents in the built-up areas. These have a dual function as small amenity parks and as extra public playing fields.

Playing Fields and Sports Grounds

Existing school playing fields total about 120 acres, of which 84 acres are detached. With two exceptions these have been left untouched. The exceptions are St. Anselm's (8.4 acres) and Park High School (9.2 acres) playing fields. These unfortunately have to give place to necessary residential extension in the Noctorum Neighbourhood Unit.

Some thirty-seven acres of additional school playing fields have, however, been allocated to the adjoining Birkenhead School fields. The displaced schools will find ample accommodation in this extension which, with drainage assured by an easy slope to the west, is admirable for the purpose.

Altogether, including the existing sites, some 155 acres are scheduled as school playing fields. This is rather less than a third of the area which will ultimately be required by modern standards but the balance will be met in the following ways :—

(*a*)	In the proposed Academic Area	estimated	20 acres
(*b*)	In the new schools on the Woodchurch Estate	,,	45 ,,
(*c*)	In Public Parks including existing facilities ...	,,	30 ,,
(*d*)	In open space adjoining new schools which will be erected in various parts of the borough ...	,,	250 ,,

More than this total area of 500 acres cannot be allocated for the use of schools without seriously curtailing other essential land uses, and it may be that to achieve even the proposed new area, some arrangement will have to be made to use playing fields both for school children and as private sports clubs.

Existing public and private playing fields and recreation grounds, exclusive of private tennis club courts and bowling greens, cover approximately 320 acres, made up as follows :—

Recreation grounds (public)	32 acres
Playing fields (private)	53 ,,
Private football, cricket and hockey pitches	31 ,,
Golf courses	204 ,,

---

* It is assumed that the whole of Arrowe Park, purchased by the Corporation in 1927, will be open to the public in the near future.

A large number of tennis courts and bowling greens are distributed in the less densely populated part of the borough. These are almost entirely used by private clubs and it is estimated that more than 50 acres are used for these purposes.

In addition, very considerable stretches of ground in the public parks, especially Arrowe and Birkenhead Parks, are utilised as public playing fields. As the parks and other public open spaces exceed accepted standards it is felt that any further sports and games facilities should be accommodated in them.

Allotments and Smallholdings

The total area of land now utilised for allotments and smallholdings within the Borough is 185.5 acres, constituted as follows :—

Permanent allotments	55.2 acres
Temporary allotments	36.0 „
Wartime allotments	78.7 „
Smallholdings	15.6 „

All the smallholdings are in the Devonshire and Egerton Wards on land which is scheduled by the Corporation for immediate development as part of the Orred Estate. Much of the wartime allotment area is held under Emergency Requisitioning powers.

Permanent and temporary allotments total 91.2 acres and in accordance with the views of the Birkenhead Allotment Holders Association, every effort has been made to preserve these existing sites. Where temporary allotment sites exist it is suggested that on the whole they be made permanent. In certain cases, however, some of the existing sites are required for residential and other types of development. Adequate alternative sites have been allocated in the districts where the demand is likely to exist in the future. Altogether 93.9 acres, an increase of 2.7 acres, have been allocated for allotment purposes.

As re-development proceeds it will be possible to allocate as allotment space some of the 'back areas' (irregularly shaped land enclosed by houses but unsuitable for building owing to difficulty of access). Preliminary provision for allotments has also been planned in the Woodchurch Estate, but this is not included in the above figures.

It is therefore evident that the future overall allotment area, envisaged in our Plan, will be substantially larger than it was pre-war, but probably less than the inflated wartime area.

Proposed Extensions to Bidston Hill Park

Unit No. 14 is that delightful area which is situated on Bidston Road, sloping westwards, and containing mostly big mansions with large gardens, some extending to several acres. Here, we suggest that the builder should be entirely kept out unless he undertakes not to put on the same site a building covering an area of more than 10 per cent of the existing covered area.

It would be better still if these big houses were converted into flats and maisonettes. Such will be helped by the several staircases most of the houses possess. By reducing the private gardens to a small area round the buildings, the rest of the grounds can be added to the present public park, and known as Oxton and Bidston Park. Princes Park, Liverpool, is a pleasant example of a similar treatment. The necessary orders, we suggest, should be drafted at once, and one of the most beautiful areas in the district saved to Birkenhead.

Rural Zone

Land used for agriculture, horticulture and pasture is a most valuable type of open space and can, with adequate public footpaths, be a useful adjunct to more formal urban parks and town greens.

Birkenhead is fortunate in having a substantial stretch of such land within its boundary to the west and south-west. Inevitable residential development will have to take up part of this area and if the spoiling effect of recent sporadic urban encroachment is

Agricultural Land

not to be repeated on a disastrous scale, it is essential that such development be well and compactly planned with adequate green rings.

The total existing area of agricultural and pasture land is about 2,500 acres (30 per cent. of the whole of the Borough) of which some 660 acres, in the Landican district, have been described by the Ministry of Agriculture and Fisheries as ' high-grade ' land. This latter area should be permanently reserved for agricultural and allied purposes with suitable protection against undesirable urban intrusion.

In addition, after allowing for residential expansion at Bidston, Noctorum, Prenton, Woodchurch and Thingwall, it has been found possible to preserve about 310 acres of agricultural and pasture land for its existing purpose. Thus nearly 1,000 acres, or 12½ per cent. of the borough area, is scheduled to remain rural in the Replanning Scheme and, having duly weighed the claims of agriculture, housing and general amenities, this is considered reasonable. Much of the area taken from the existing rural zone by the requirements of housing must be balanced against the increased number of greens and public open spaces which have been planned in the built-up area of the town, e.g. the increased open space in the Central Conway Neighbourhood Unit from .6 of one acre to 16 acres.

Public Footpaths

The function of the public footpath has changed during the last 50 years. Its utilitarian value, as a short cut where vehicular transport was inconvenient or absent, has considerably diminished with the rising popularity of cycle and car and the advent of good rural bus services. Consistent with this diminution its amenity or pleasure value, as a rambling way or connecting link between isolated open spaces, has very much increased. In recent years there has been a constant and growing agitation for the improvement and increase of public footpaths ; this is generally admitted to be for the general good of the people. Even farmers and country-dwellers, who might reasonably be expected to resent uncontrolled intrusion of townsmen, realise that an adequate system of well-defined and co-ordinated paths will ' canalise ' the ramblers and minimise damage to growing crops and cattle.

In accordance with this general trend of opinion we have tried to extend and improve the existing paths into a co-ordinated system. There are three very good ' runs ' at present, namely: from Bidston and Noctorum respectively to Woodchurch (thence by a short stretch of rural road to Arrowe Park), and a third from St. Saviour's Church across the railway and via Landican Lane to Thingwall. The new Woodchurch Estate will necessitate some diversion of the first two and will inevitably destroy much of their pleasure value, although the lay-out as approved by the Corporation preserves present amenities as much as possible. Existing footpaths in this area are shown on the Open Spaces Map (No. 43 page 95) pending the development of this estate.

Many new public footpaths are proposed which, with existing and proposed open spaces and parkway strips, form an almost continuous circle round the town. In the plan it will be possible to walk considerable distances almost entirely by green paths and in comparative safety. One walk (nearly nine miles) would be that from Argyle Street through Bidston and along the Fender Valley, via the outskirts of Landican in the borough boundary at Thingwall. Another (4½ miles) would take one from the Southgrove Nursery in Woodchurch Road to a point beyond Upton.

In the urban South-east part of the borough an effort has been made to link up the scattered open spaces, but there is neither the necessity nor the facility for a complete co-ordination by footpaths. The roads do this. Nevertheless, several walks of a mile or more are possible without taking to the latter.

It is recommended that a few shelters of open construction and some seats to be placed at selected spots in the footpath system (not, of course, on paths adjoining allotments or private institutions). Also, during the summer months, light refreshment huts might with advantage be permitted at the confluence of several paths, e.g., that east of Upton where the road passes over the railway, and that on the new triangular piece of public open space where the railway crosses the Woodchurch Road.

Apart from the various types of open space enumerated in this section there are many institutions which have substantial open land attached, e.g., Upton Convent, the Isolation Hospital, Thingwall Sanatorium, Crosshill Reservoir, the proposed new Municipal Hospital, etc. Although not normally accessible to the public these areas must be included in any consideration of open space provision for Birkenhead as a whole.

A comprehensive list of all types of parks and playing fields existing and proposed is given in Appendix 17.

Riverside Use

The Riverside frontage to Birkenhead has developed rapidly during the past 100 years. At the present time, however, there is no open space allowing the people of Birkenhead to have access to it and its fresh breezes as well as its interesting view of river, shipping and docks.

The existing percentage of usage of the Mersey River Front is as follows:

User	Length of River Front in Feet	Percentage of whole Front
Ferries	1550	11%
Industry	7047.5	47.8%
Railway	350	2.6%
Residential	2900	20.8%
Derelict land	2500	17.8%

The above has clearly been developed in three predominating ways:

(*a*) From the Wallasey Borough Boundary at the entrance to the Wallasey Dock to Seafield House, the predominating users are graving docks and shipbuilding and repair yards. With these is a mixture of noxious industries such as glue and leather works, and the Woodside Lairage. In this section are the Ferries, the Wallasey landing-stage for cattle and goods, the Woodside Ferry, for passengers, cattle and goods, and the Monks' Ferry now used as a coaling stage only.

(*b*) From Seafield House to Rock Ferry Pier there is a mixture of derelict lands used up partly as allotments, playing fields, etc., and a small portion of residential development and school.

(*c*) From Rock Ferry Pier, south to the Bebington borough boundary, there is large, old-fashioned residential development. This is the only part of the river front to which the public has any access. It is by way of a narrow esplanade and a small beach used at low tide. In spite of this, small areas of the front have still retained much of their interest, although the growth of industry has placed them in surroundings which make them no longer attractive to visit.

Monk's Ferry

Monks' Ferry was the first river front railway terminus (see Map No. 5 page 2), and it still retains part of the original layout. Adjoining it, now empty, is a large house named ' Ivy Bank ', still standing in its own grounds, and formerly the home of Mr. Humble, a shipowner. This section of the Birkenhead peninsula has always been important. In mediaeval times it was the site of a ferry because it was on the shortest route across the Mersey to Liverpool; later, in the first phase of residential development, an hotel used by sportsmen and tourists existed to the south of it.

Rock Ferry

Rock Ferry retains a little of the grandeur of the days when it was a select residential neighbourhood. Very pleasant it must have been with its views over the Mersey, and its garden gates leading to the river. Now, as suggested, a large proportion of the population will be able to enjoy it, rather than the few who live in the Rock Ferry houses.

Under the proposed user the Riverside will be developed in the following percentages :

User	Length of River frontage	Percentage of whole front	Remarks
Ferries	1550	11%	Unaltered
Industry	6350	45.2%	
Railways	350	2.6%	Unaltered
Casino (Cafe and dance hall)	350	2.6%	On existing Corporation coal yard
Open space	5400	38.6%	Temporary and permanent
Zoned for further industrial development	2340	23.8%	

The industrial area will be permitted extension over a further 2,340 ft. (approx.) of river frontage reaching from the existing shore line to the line of low tide, when this development is required. The back land to this frontage is reserved as temporary open space for use as industrial area when required.

The unrestricted open space will extend from Rock Ferry to the Bebington borough boundary, with further temporary open spaces from Rock Ferry, north to the shipbuilding yard. These two spaces will be planned as a whole. The Esplanade will reach from a new entrance at the edge of the shipbuilding area to the Bebington borough boundary, and will probably be shown to be extended beyond that by the Bebington plans when made public.

The present access is limited to Bedford Road. Increased points of access are shown (Maps 41, 42 and 43, see back cover and pages 66 and 98) so that the river front may be enjoyed in a way not known for many years. If Rock Ferry is reopened, and full use made of the hotel and other amenities existing and proposed in this area, it should prove an ideal spot for an afternoon's outing near the river.

Municipal Sports Centre

It is proposed that an area of 60 to 80 acres in the north part of Arrowe Park shall be developed as a Wirral Sports Centre. Much of this open space is already used as playing fields but Birkenhead and Wirral would benefit directly and indirectly if this area were to be planned as a comprehensive and unified focus for physical recreation. A permanent cinder running track, a quarter- or half-mile in length, and supplemented by jumping and other special facilities, should be laid out to surround a first-class football or cricket pitch which would be reserved for matches of local importance.

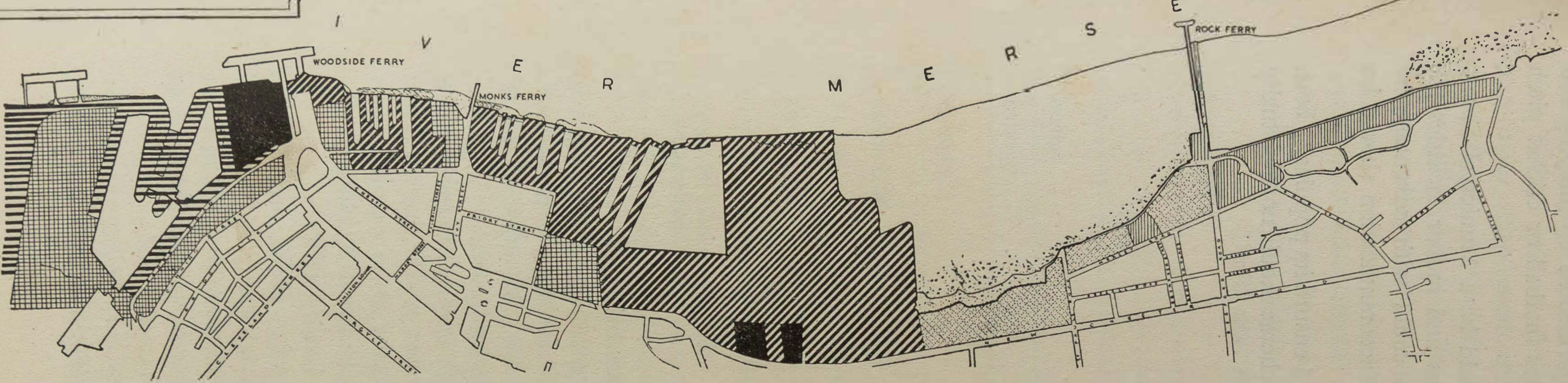
Planned in close relationship to the foregoing should be a Municipal Sports House with adequate changing rooms, baths, refreshment rooms and indoor facilities for badminton and tennis. An open-air swimming bath and lido could with advantage be included in the scheme and in this case the necessary changing accommodation should be incorporated in the Sports House.

The central location in Wirral of such a Centre would ensure its popularity both within and without Birkenhead, and there is no reason why such a scheme should not eventually be financially self-supporting.

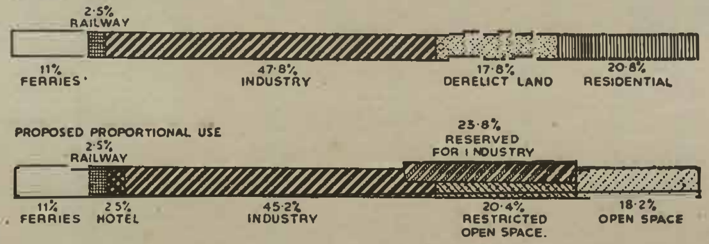
BIRKENHEAD PLAN
BIRKENHEAD PLANNING SCHEME

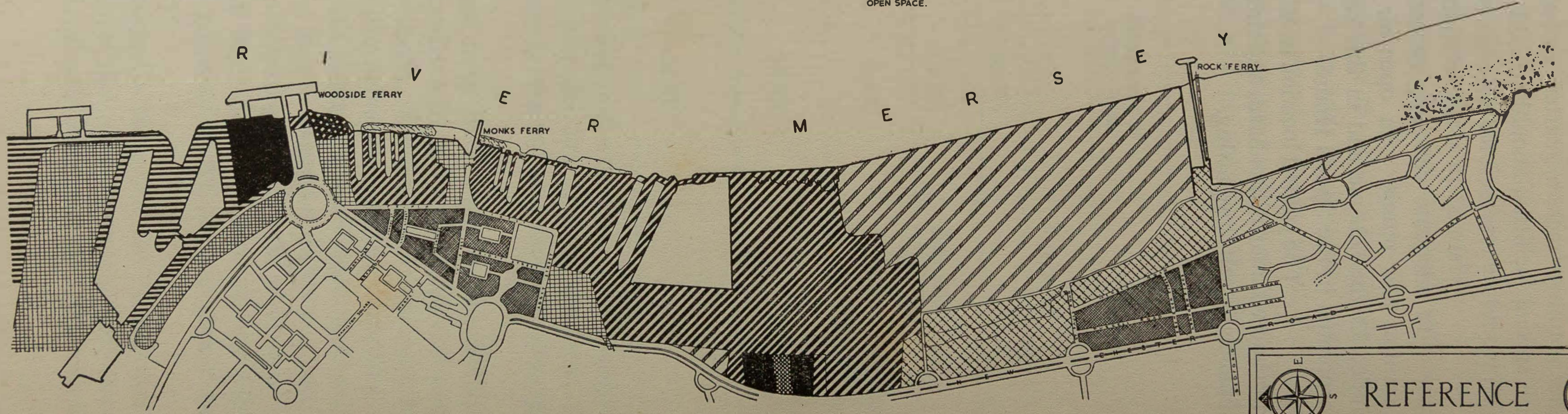
RIVERSIDE USE

SCALE OF FEET



EXISTING USE





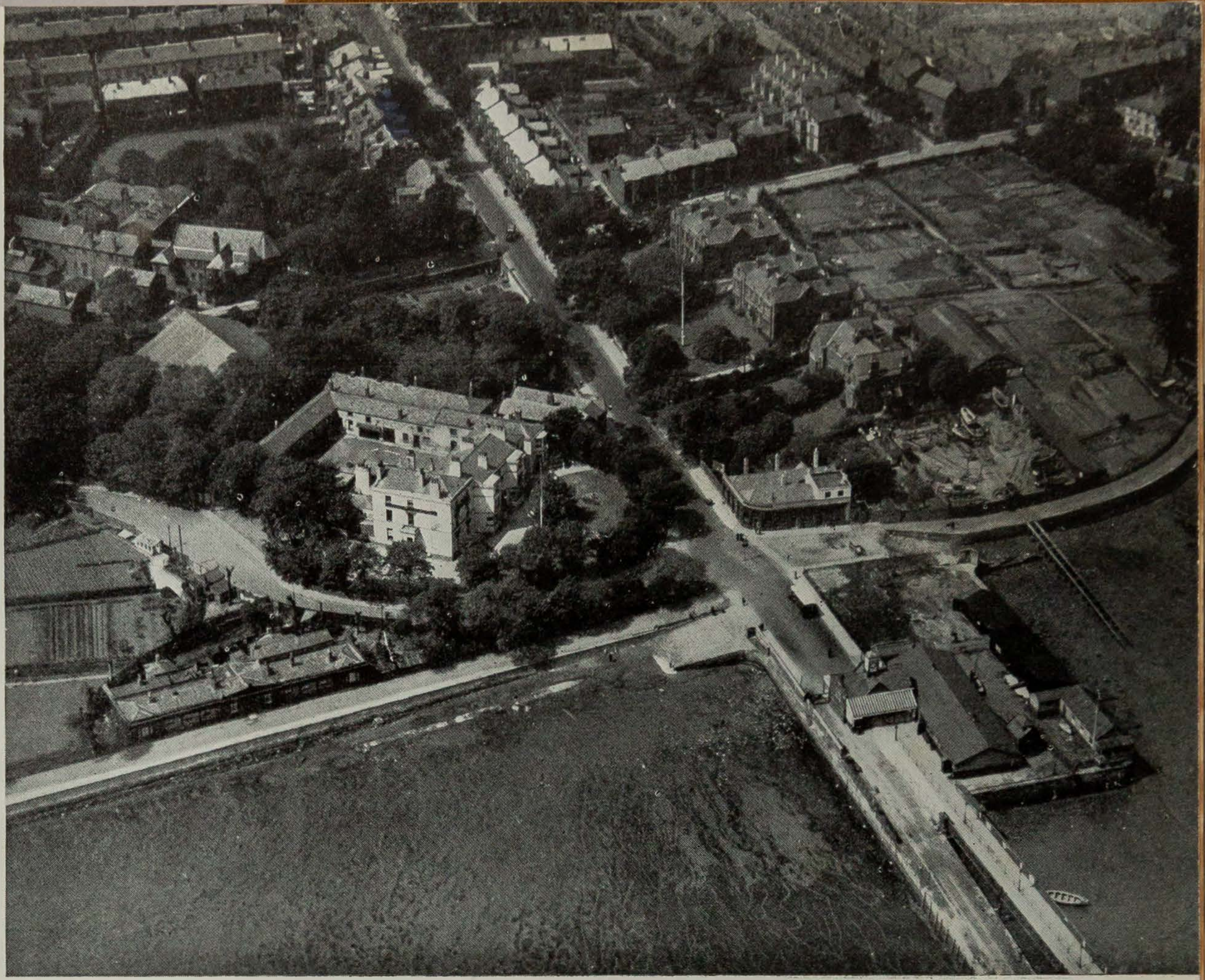
PROPOSED RE-DEVELOPMENT

REFERENCE

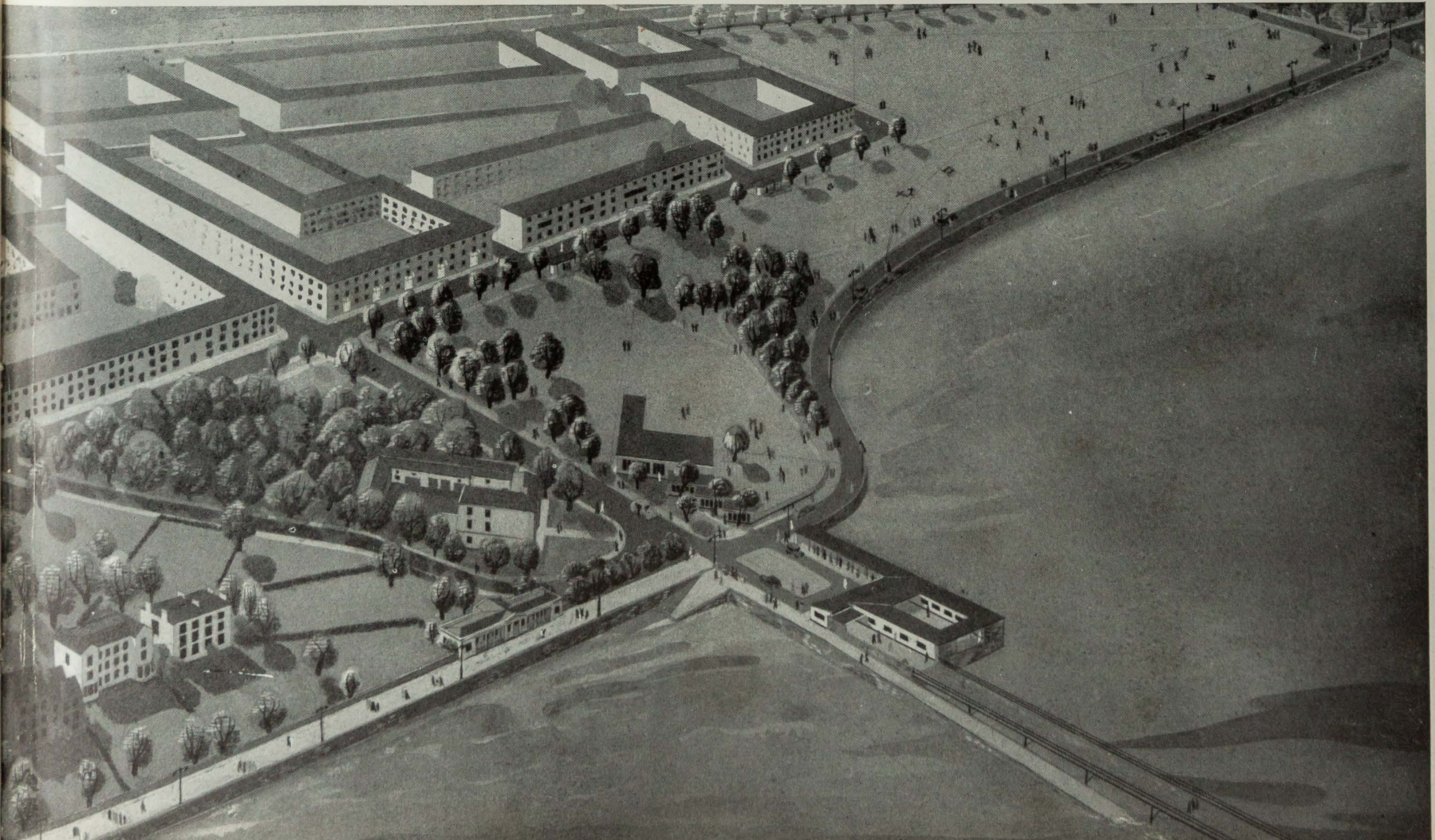
53.

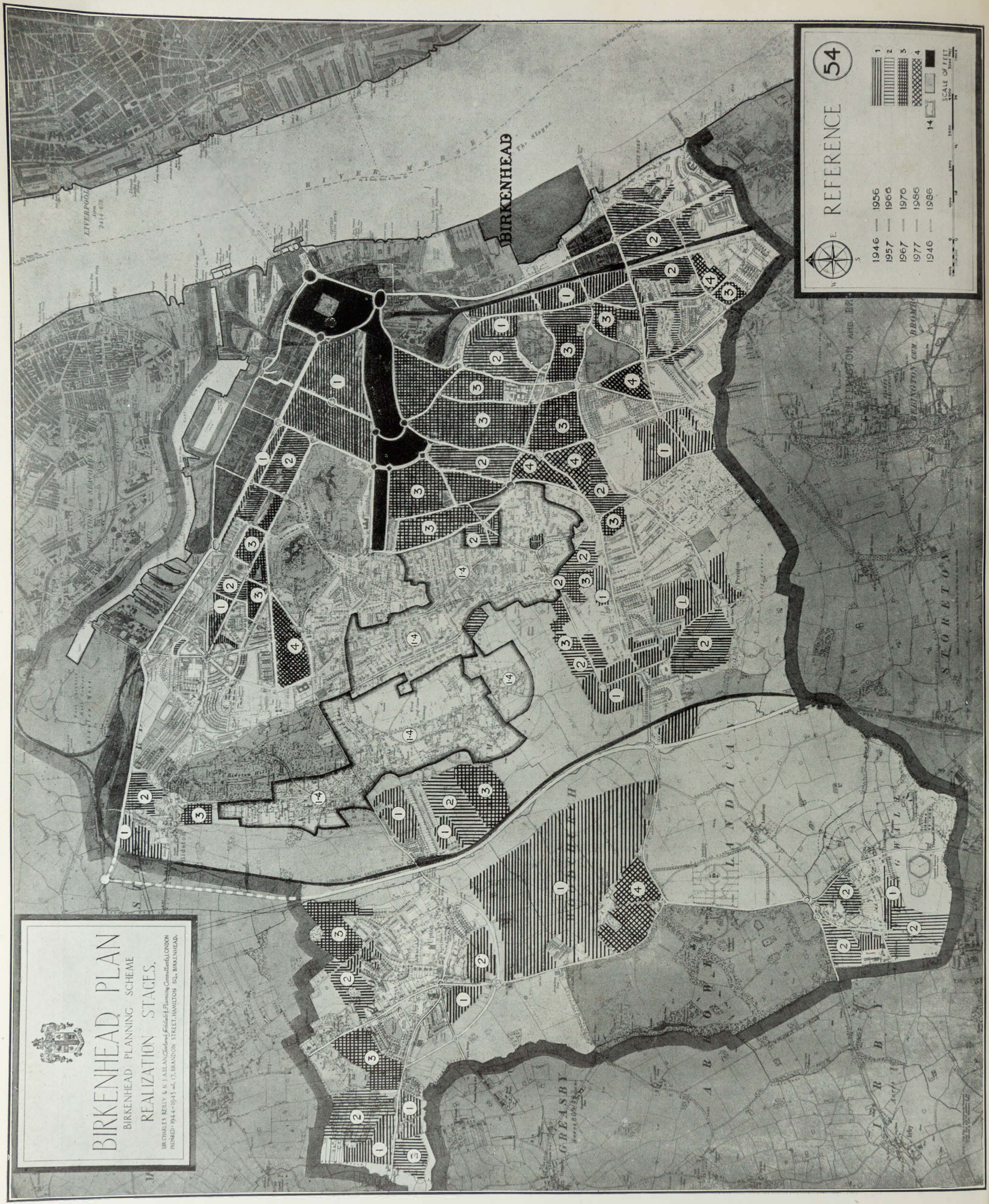
EXISTING		PROPOSED	
HEAVY INDUSTRY	▨	HEAVY INDUSTRY	▨
NOXIOUS INDUSTRY	■	NOXIOUS INDUSTRY	▩
RAILWAYS	▦	HOTEL	▧
DERELICT LAND	▒	OPEN SPACE	▨
RESIDENTIAL LAND	▥	TEMPORARY OPEN SPACE RESERVED FOR INDUSTRY.	▧
		LIGHT INDUSTRY	▩

ROCK FERRY as it is.



ROCK FERRY AS PLANNED, with its extended esplanade and open space designed to restore—in some degree—ancient public access to the Birkenhead river front.




BIRKENHEAD PLAN
BIRKENHEAD PLANNING SCHEME
REALIZATION STAGES.
SIR CHARLES REILLY & N. J. ASLAN Chartered Architects & Planning Consultants, LONDON
PREPARED 1944-1945 at 17, BRANDON STREET, HAMILTON SQ., BIRKENHEAD.
REFERENCE
54
1946 — 1956 1
1957 — 1966 2
1967 — 1976 3
1977 — 1986 4
1946 — 1986
14
SCALE OF FEET
W
E
S
LIVERPOOL
RIVER MERSEY
The Sloyne
BIRKENHEAD
STORETON
GREASBY
LANDICAN
ARROWE
PRENTON
BEBINGTON CUM BROMBOROUGH

Section Nine

REALISATION OF PLAN

Long Term Policy

THE GENERAL PLANNING proposals described and detailed in the previous sections appear at first glance, no doubt, a very big task. Indeed, to some they may appear altogether too idealistic to be practical. Fortunately, however, on consideration this will be seen not to be the case. The proposal plans and sketches show the final scheme as it should appear when finished. This we estimate will take forty years. We suggest, however, a gradual replanning and reconstruction for this long term policy. To understand how this will work we propose dividing the forty years into four periods of ten years each and it is only at the end of the fourth period that the whole scheme will appear. In the meantime a reconstruction policy should be laid out to a schedule to be followed. We suggest the planning of this schedule should be undertaken at once by the proper officers and be submitted to the appropriate Committees.

Stages

To give some guide to the forming of this schedule, we have drawn up our four stages plans (Maps Nos. 44 and 54 back cover and opposite). Each of these gives a picture of the development and reconstruction which should have been carried out at the end of this period, viz., 1956, 1966, 1976 and 1986.

In practice each plan of a ten year stage should in fact be divided into two five year plans and the reconstruction areas in this way reduced to still smaller proportions which could be reasonably grasped by the layman. If this is done the scheme as a whole will lose its appearance of impracticability and become both reasonable and manageable. The position in Birkenhead, and indeed in the whole country, is that building must and will go on as before. A plan, therefore, of some sort, either this or another, must be prepared if the past haphazard methods are not to be perpetuated and an efficient town is to take the place of the present one.

The Machinery

Town planning is a co-operative affair. No one man, town planner, architect, engineer or builder, makes the final plan as carried out. There is today no town planner alive who could alone prepare a modern town planning scheme in all its complexity. We suggest, therefore, the town should have first an Executive Town Planning Committee and then the following officers reporting to it, and finally, if necessary, to the Council :—

1. An Executive Planning Officer who should have a good knowledge of design. In the short time at our disposal we have made a few detail lay-out plans of parts of the town and its surroundings as examples, but as examples only. That is not enough. The whole reconstruction areas will have to be replanned one by one. The five and ten year plans must in the first case be prepared by him in consultation with the Architect and the Engineer, and submitted to the Committee.
2. An Executive Borough Architect should be appointed as suggested elsewhere in this Report, reporting to the various Committees and others, and where necessary to the Council. The Borough Engineer and Surveyor cannot, it is clear, do his routine job without such a colleague. The Engineer cannot be expected to report on architectural design, and from our fifteen months experience here, we see he does not do so in any critical sense. We have not been able either to discuss such matters with the

Engineer's chief architectural assistant, but we do not, in any case, think an assistant whose ideas may be over-ruled, is the right person. The bad state of the main streets of Birkenhead and its poor surburban ones, except where the richer classes live, is due in a large measure to the fact that the plans, including elevations, have had in the past to be submitted to an engineer and not to an architect.

When the Executive Planning Officer and the Borough Architect are appointed with the same authority as the Borough Engineer, the three will—if the right men are chosen, a very important point—work together as a team, each contributing his inseparable and invaluable quota of ideas to the whole.

New Industrial Areas

As the realisation of Housing Policy has been considered separately, we pass on to Industry.

Birkenhead is badly in need of additional areas for new industries as detailed in Section 3. It will be seen too in Appendix No. 8 that an additional area of 422.7 acres has been suggested for the purpose. If the Gas Works are removed as suggested to the North Wales Coalfield there will be a further 18 acres which we suggest, however, the railways could make the best use of. The sites of some of these areas, such as those round the Bidston Dock and the Tranmere foreshore, are ready for immediate development. For the latter the Mersey Docks and Harbour Board suggest that from an economical point of view the development of this area should be left until such a time as an interested party comes forward. We believe, however, that the Board should modify this policy and arrange for at least a part of the site to be made ready for immediate use. It is only in this way, so it seems to us, that a prospective user would be tempted to come forward. It should be borne in mind that development of this character entails reclamation of the foreshore, and that takes some time to execute.

The area immediately north and south of the Bidston By-pass is another site ready for immediate use. The area north of Price Street is an industrial reserve to be drawn upon as needed. The large masses of houses it contains are already blighted and sub-standard, and its population should be on a priority for rehousing. The same state of affairs exists in the areas between Green Lane, Bedford Road, the railway and the Tranmere foreshore. Here the houses are in a similar condition and some sites are already cleared.

The areas east of Chester Street will be reserved for industry but should some site be cleared it should immediately be put to industry. Unfortunately the small area south of Beaufort Road has been allowed recently to be reconstructed as a residential unit. In spite of the newness of the property it must be zoned for industry as far south as the Mersey Railway.

Commercial Civic Centre

The core of the Civic Centre is already established in the Hamilton Square neighbourhood. It is the area at the back of the present buildings which our scheme affects. By the time, however, that it materialises, the intake areas will be ready to receive the dispossessed population from what is really a sub-standard, if not definitely a slummy part of the town. The two south corners of the Square should be developed as soon as priority housing needs are satisfied.

Argyle Street

The business premises in Argyle Street, some already with vacant sites, should be given a chance of development as soon as possible.

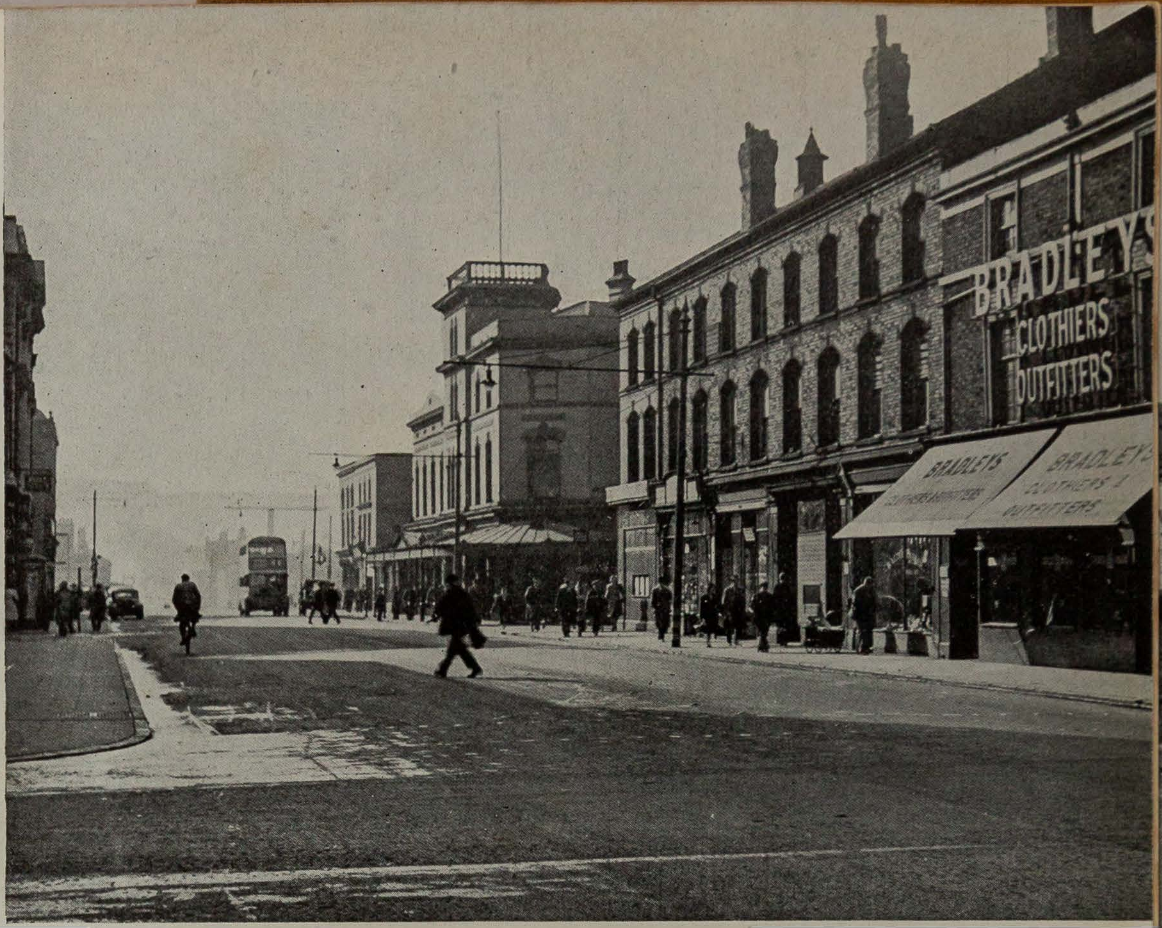
The Town Hall and its New Adjuncts

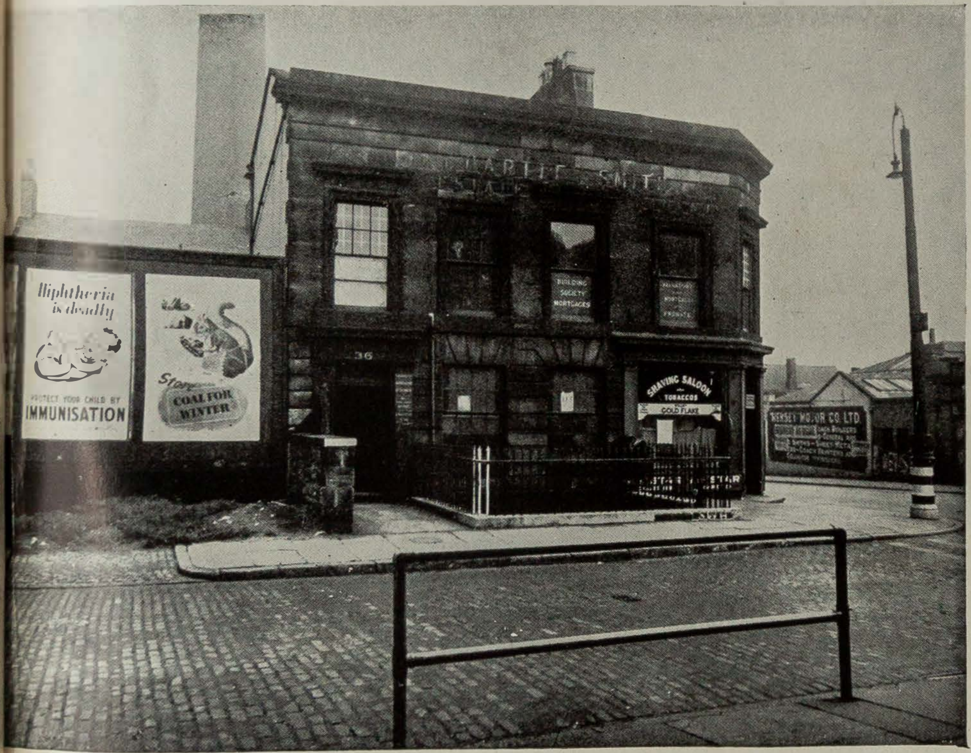
The proposed new Council Offices and Civic Hall wings to the present Town Hall should be constructed about the latter end of the first ten years' period, when housing needs are satisfied. In the meantime there is land for present building. The open courts and squares shown can be built over for the Civic purposes as soon as the present occupiers have been removed to the new intake areas.

Shopping Centre

The trend of shopping in the Grange Road area seems to be towards Charing

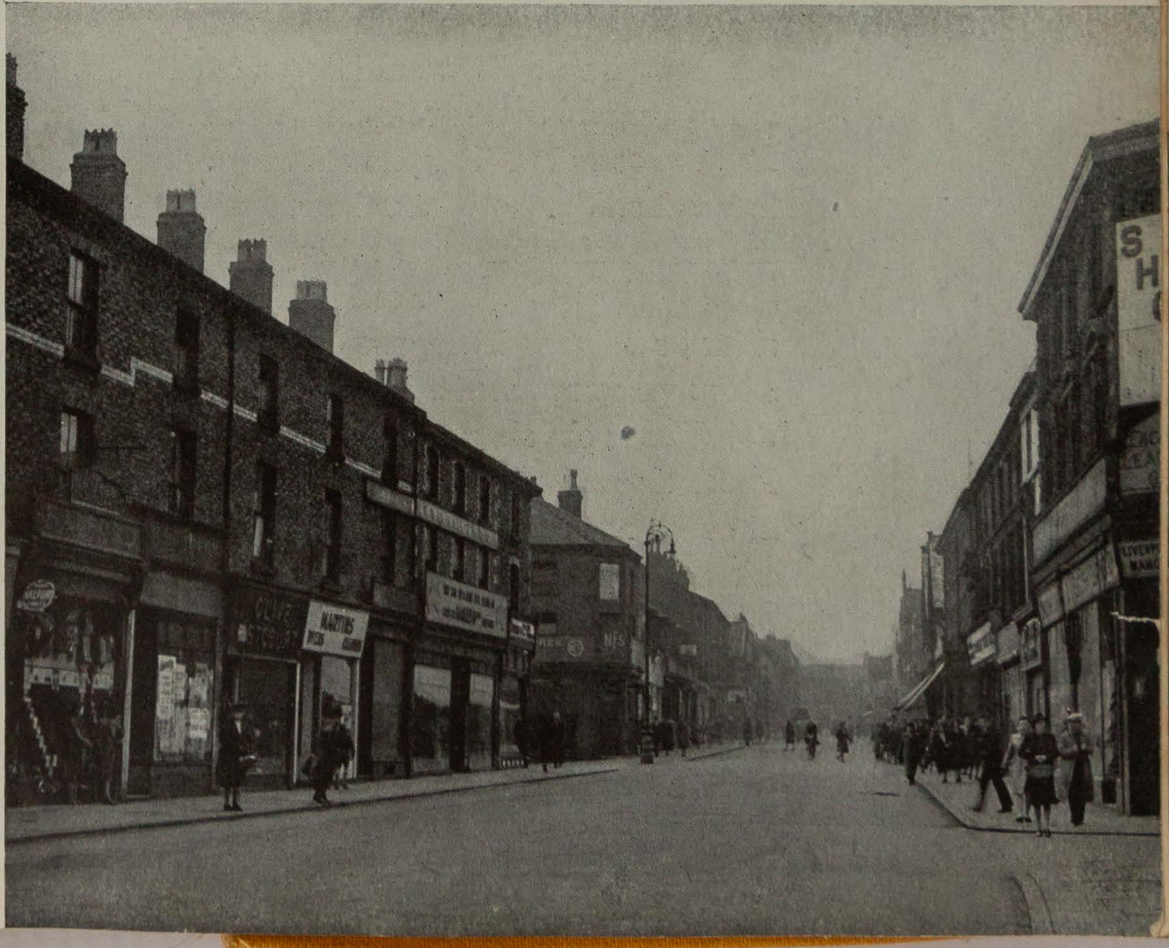
ARGYLE STREET, an important thoroughfare which lacks distinction. The nearest block of shops marks the site of the car park of the proposed Amusement Centre.



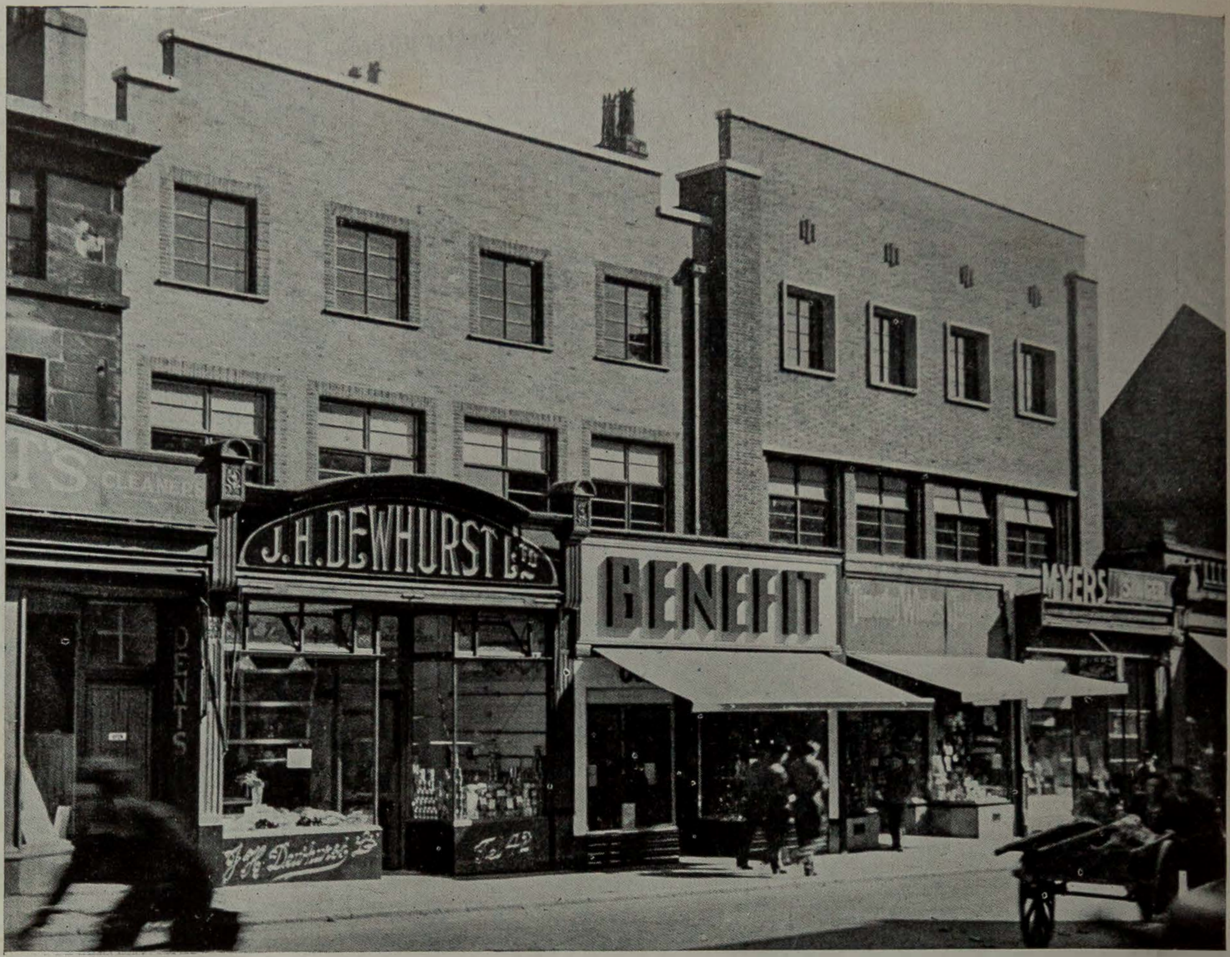


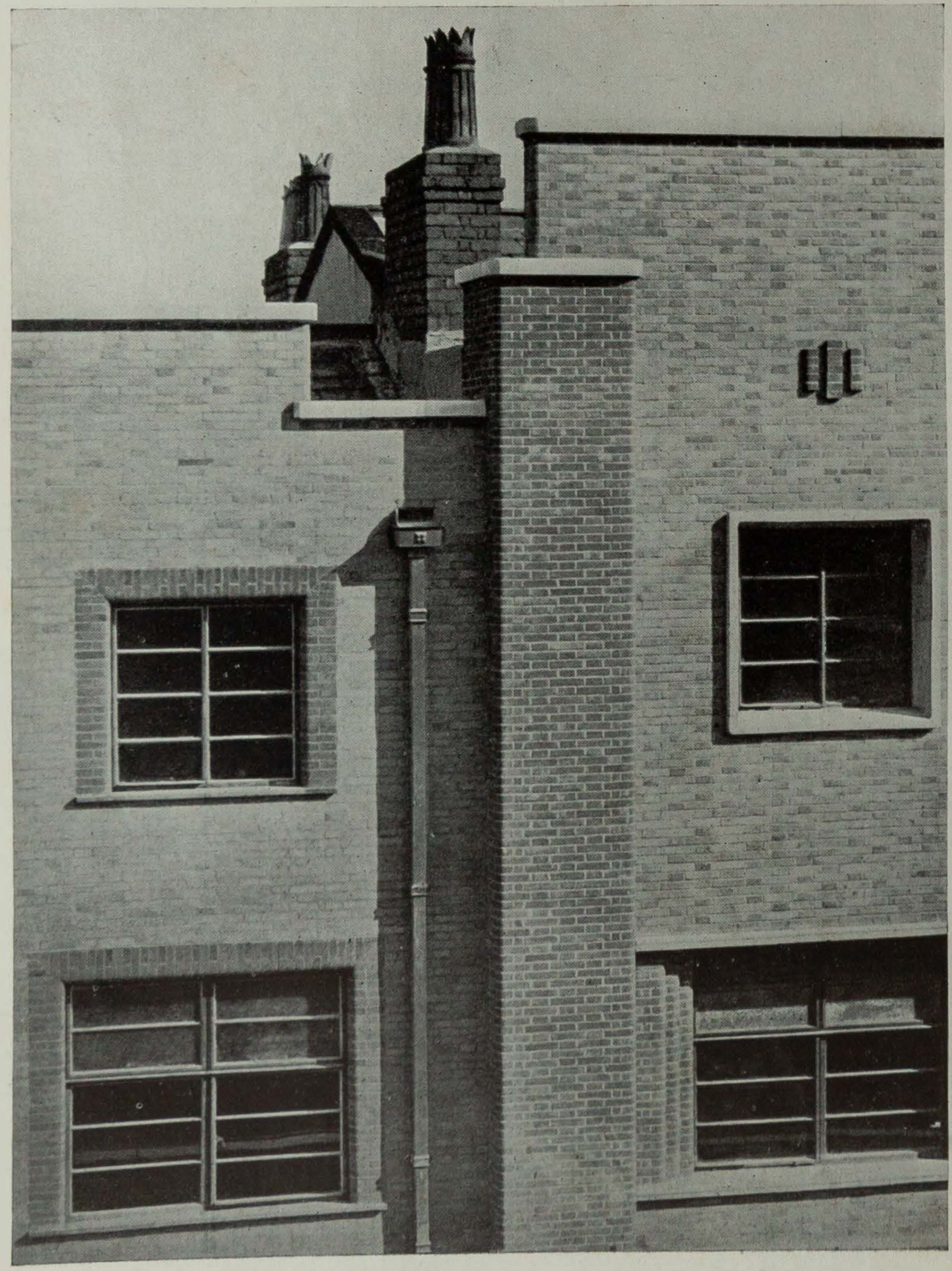
A BRIDGE STREET CORNER, the appearance of which is spoilt by advertisements.

GRANGE ROAD, the main shopping street, a centre unworthy of a town of Birkenhead's importance. Many Birkenhead people shop in Liverpool.



IRREGULAR RECENT DEVELOPMENT in Birkenhead.





IRREGULAR RECENT DEVELOPMENT in detail.

Cross. The result is that the eastern end of Grange Road is neglected and is even beginning to look slummy and blighted. One result of this is that it makes a very bad approach to the main shopping street of the town. Development should, therefore, start at this east end of the street and owners should be given facilities to begin these at once. We recommend further that owners on the south side of Grange Road, where widening will take place, should be advised in the meantime to re-start their business at the eastern end, returning later to the widened street. The effect of this too will be to enhance the government area round the General Post Office.

Grange Road West

The development of Grange Road West comes next. The Park-Library Crescent to Charing Cross, once established, will become a magnet for good class offices and showrooms, such as those of the Gas and Electricity departments. When in this way the two ends of the shopping centre have been realised, the centre itself will follow in the natural course of reconstruction.

Roads

While the redevelopment of the different areas is taking place, road adjustments, widenings and reconstruction should take place too, priority being given to the main arterial roads where reconstruction for certain lengths is implied.

Traffic Features

Special traffic features, such as the Argyle Street By-pass, the oval Tunnel *Place*, and the Woodside roundabout, should be tackled very early in the scheme. It is only when these features have been developed that the town will begin to look in a condition, in our opinion, for further development to take place.

Special Buildings

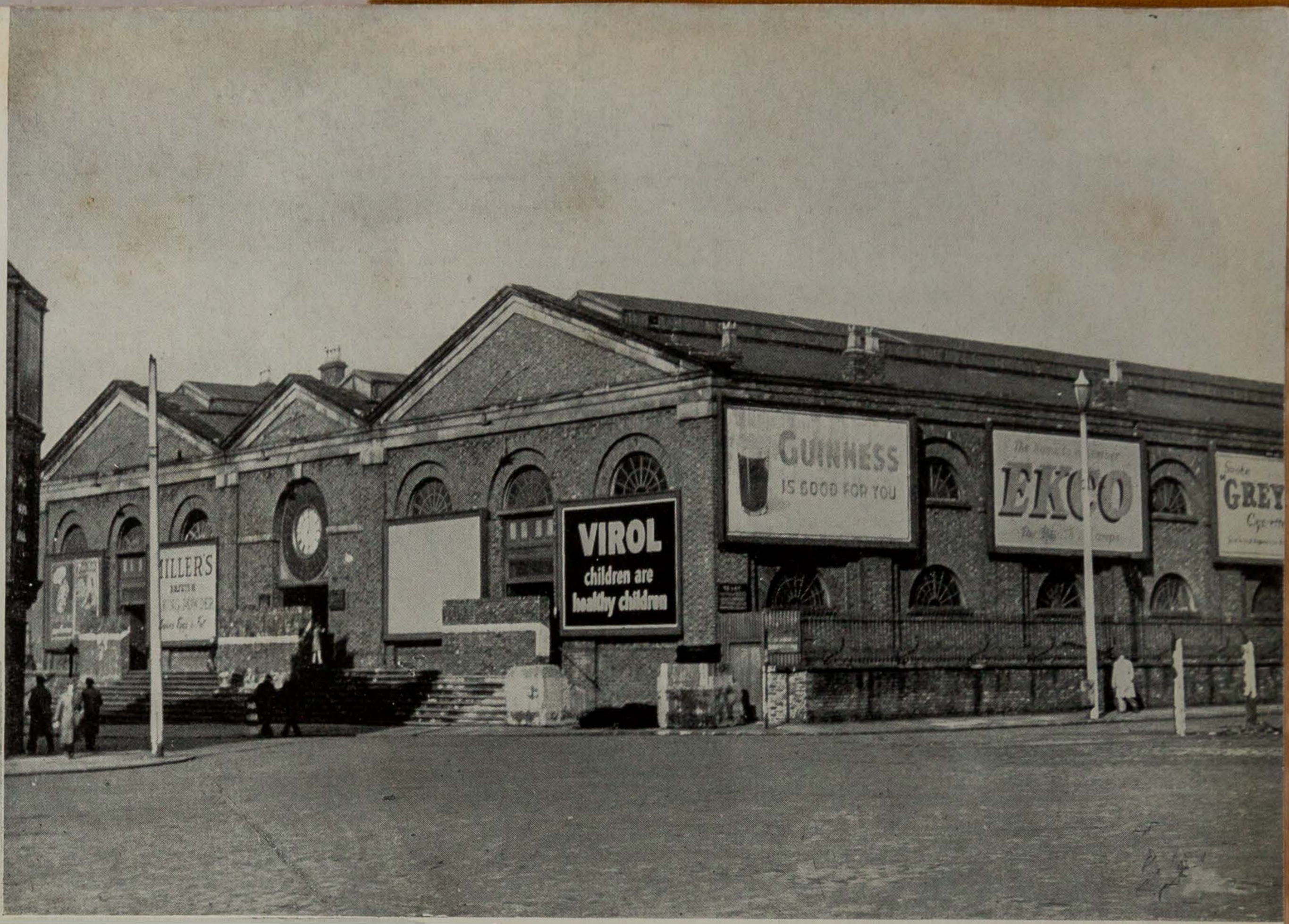
The long distance bus station near the Tunnel *Place*, the Corporation Transport Garage and Offices at New Bridge Street, the Clinics and Schools required, should be part of the first ten years' plan, while the new 1,000 bed Hospital might be first item in the second ten years.

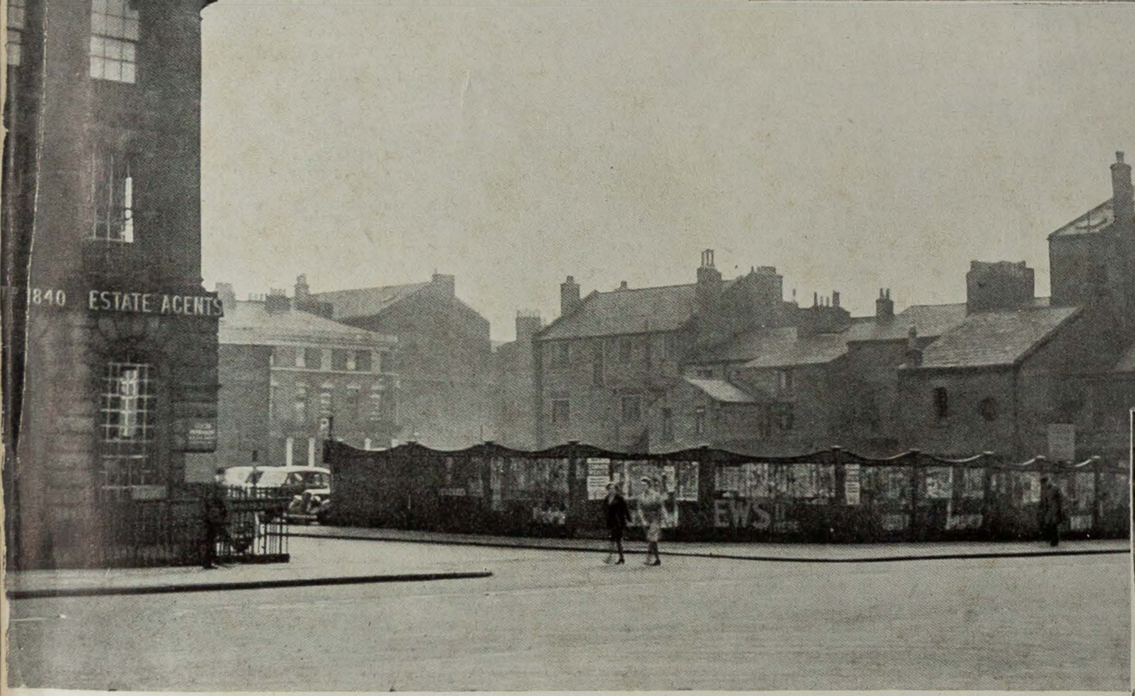
Projects that will pay a different dividend, like the tall glass Casino adjacent to the Woodside Landing Stage and the great Hotel, once the London trains have been quickened and have brought new people to the town, should be started as soon as the Government allows.

Acquisition of Land

In order to overcome the difficulties of compensation and betterment, the Corporation are advised to take advantage of the 1944 Town and Country Planning Act and to buy these areas affected by the schemes set out, together with any adjacent land which may be improved thereby. If this is done in a brave enough way the Corporation may find, as Brighton has done with its great Western Road improvements, that alterations which at first might seem impossibly large turn out in the end to be paying propositions.

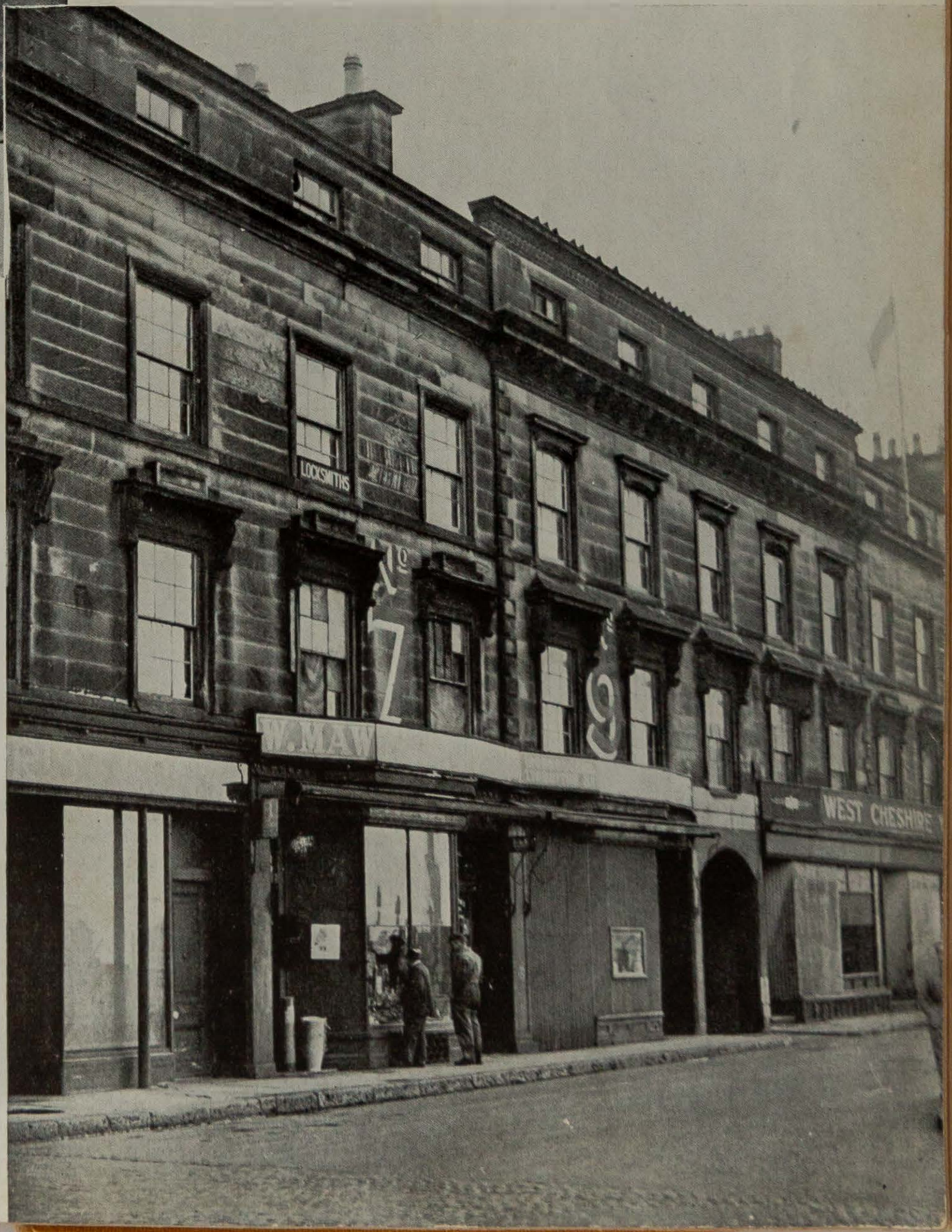
THE MARKET HALL, which can never look its best until its unsightly adhesions are removed.

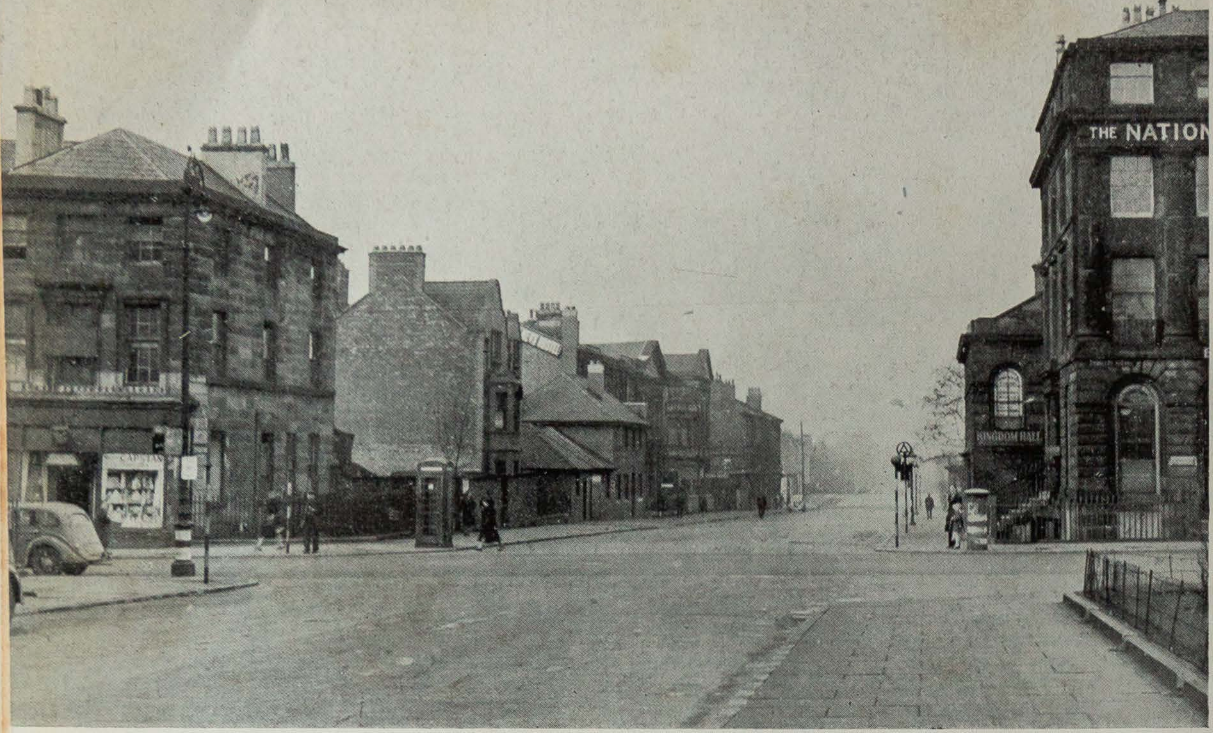




HAMILTON SQUARE—SOUTH EAST CORNER, where the stately contrasts with the slatternly. A Civic Assembly Hall is proposed for the open site.

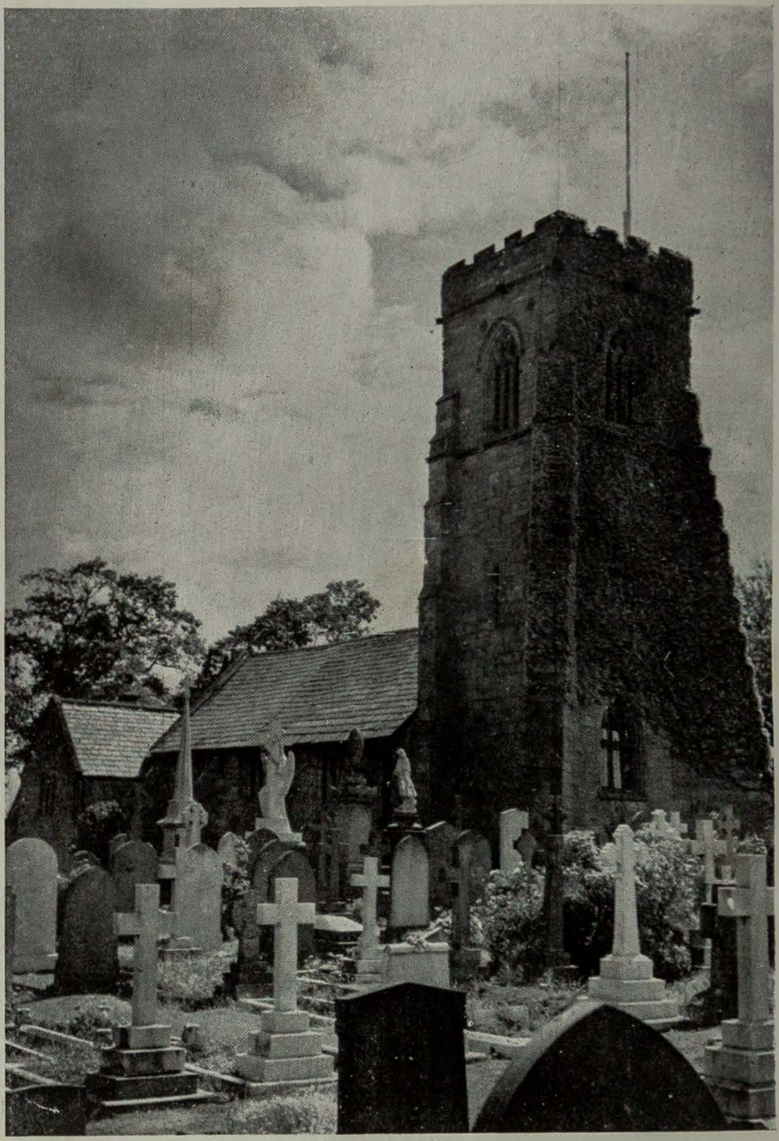
A FINE WELL-PROPORTIONED FRONT marred by later additions. It is suggested that a limit be placed everywhere to the size of letters.

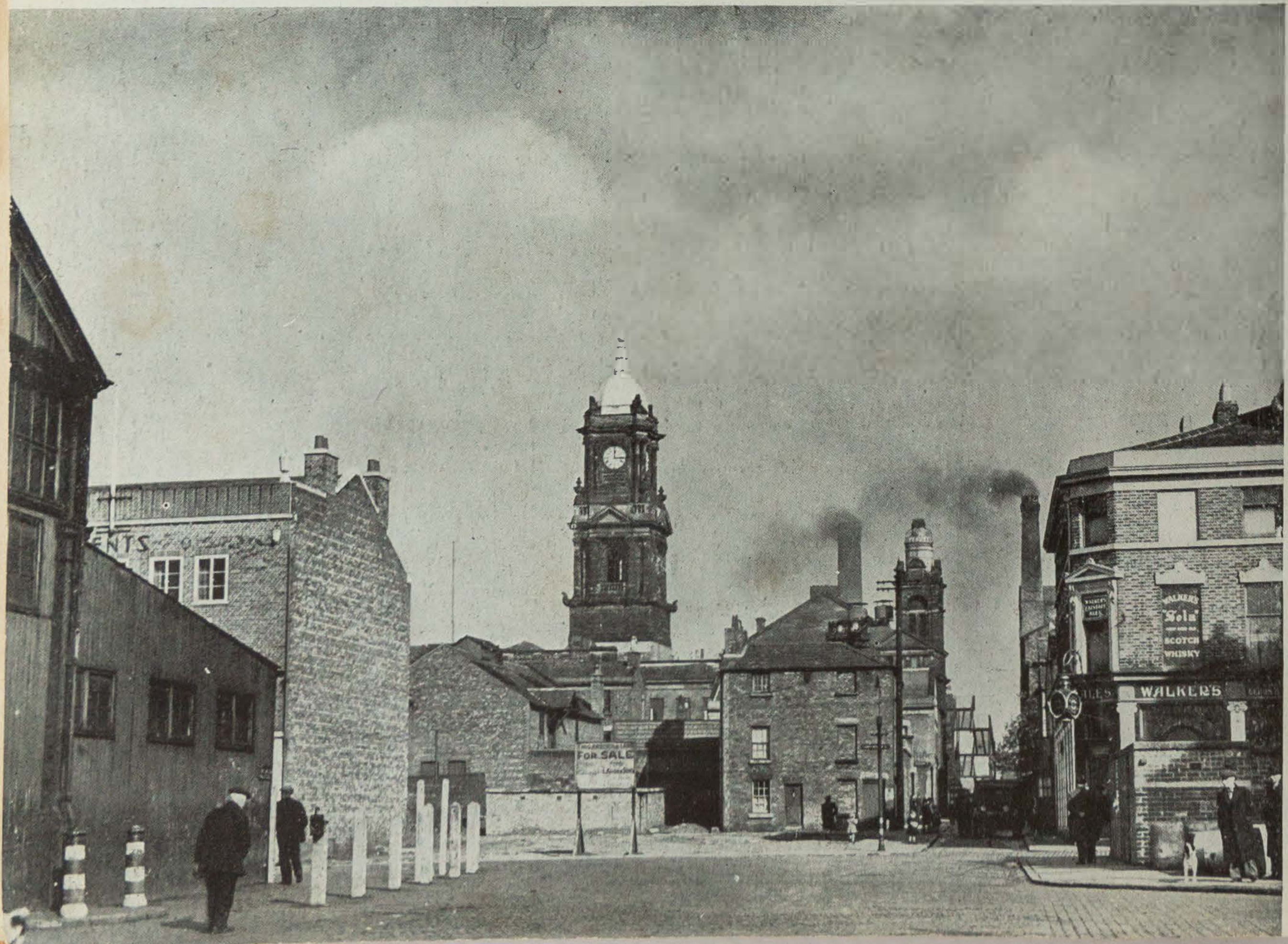




PRICE STREET TO-DAY, a typical long dockland street.

MARBLE MONUMENTS which detract from the beauty of this ancient sandstone tower, and are entirely out of harmony with their setting.





THE TOWN HALL from Cross Street.

Section Ten

PROPOSALS FOR BRIGHTENING THE TOWN

Borough Architect

OUR FIRST PROPOSAL IS that the Corporation should appoint a first-class architect independent of the Engineer and Surveyor and reporting direct to the Council. Portsmouth, Southampton and many other towns have now such town architects and have greatly benefited thereby. They have succeeded too in appointing very distinguished men. We strongly feel that Birkenhead, with its architectural background and history, a background which unfortunately has been allowed to decay without anything comparable taking its place, should appoint such an architect before it is too late. To him would come the plans and elevations of all new buildings, and such drawings would then receive for the first time an architectural criticism. We have noticed in the forms concerning new buildings submitted to us that, while space is left for town planning ideas, no space is provided for architectural criticism. The result, looking mainly at the centre of the town, is that while there are still short lengths of uniform streets these lengths have been broken into with new buildings of a violently different character, and that where such has been allowed as a climax, this climax itself has been at once lost by another building, different from either, being placed alongside of it. A fine old terrace in Bridge Street has been shorn of its end feature for a newer building in quite different materials and design. Argyle Street and Hamilton Street were once two of five thoroughfares of sufficient width to allow the cornices and skylines to be echoed by the foot pavements. Now all such niceties of design have been allowed to go by the board. Admittedly architectural taste changes and such changes will be echoed in the buildings, but streets remain and the town which owns the streets has a right to see that street values are also maintained. With a good sensitive town architect this would be the case. The result of his work would be seen, not only and indeed not most, in the buildings he designs for the town but in his influence on the designs of other people.

Preservation

Birkenhead in its immediate suburbs suffers from great numbers of Victorian buildings now reaching the end of their useful life by single occupiers. These will have to be pulled down, or converted into maisonettes and flats, but in either case the results will to some extent belong to the town as well as to the occupiers. We are suggesting that a large area be added to the open spaces of Bidston Hill and that instead of pulling down the big houses there, each with several staircases and three or four acres of garden, and allowing little houses to be built in their stead, the character of the neighbourhood be preserved by turning the gardens into a public park and the big houses into maisonettes. All this new usage everywhere, which the Plan cannot avoid, will require great tact on behalf of the town, if it is to be done properly. This tact a good architect of wide views and experience alone possesses. The definite new projects too, which we are suggesting for nearly all areas, will require the same good sense from the town's point of view, a point of view which it would appear has largely been neglected since the days of Hamilton Square. A town, like many other things, to be successful must look its best and to do this it must have its own architect always looking at it and seeing that no private interests spoil its public appearance.

Smoke

Our second suggestion for improving the town is that every effort be made to make it look cleaner. First comes the prevention of smoke. Smoke, we realise, has been encouraged rather than the reverse during the war years. Since the end of the war however, factory chimneys are still smoking. One near our office in Brandon Street, Hamilton Square, has deluged the latter with smoke several times a day since VJ day.

Black Joints

Our next suggestion is that everything possible should be done to abolish the use of cinders in mortar. This at present disfigures, with a few noble exceptions, all the towns of the North of England. In the south most joints between brick and brick are white or yellow. North of Rugby they are mostly black, and more completely so after Crewe. There are, however, exceptions such as in the recent repointing work in Sheffield, and in certain Birkenhead public-houses such as some of Yates's Ale Houses and the Conway Arms Hotel. The Mersey Tunnel Ventilating Shafts and similar modern works follow suite, as does, of course, the excellent Williamson Art Gallery, the best recent building in the town. The essence of the matter appears to be laziness, though, of course, builders claim cinders make stronger joints than sand. Tests, however, do not bear this out. With cinders in it the mortar can be kept beaten up and free from setting for a longer period than with sand. There are even some black mortar merchants in northern towns who keep this black article and sell it from day to day to builders. We have consulted the Government Research Station on the subject and they say that within a radius of 30 miles from Birkenhead sand suitable for grading with mortars can be obtained from the following pits :—

Delamere, Northwich, Cheshire.
Llan-y-Pwll, Wrexham, Denbighshire.
Pant Farm Gravel Pit, Gresford, Denbighshire.
Rosemere Gravel Pane, Byeham, Mold.
North Hall Sand, Worthington, near Wigan, Lancashire.
Gross House Sand, Appley Bridge, near Wigan, Lancashire.

The Building Research Station also state that dune sand can be washed and the process is not costly with proper plant, and that such washing is commonly done for the sands used in concrete.

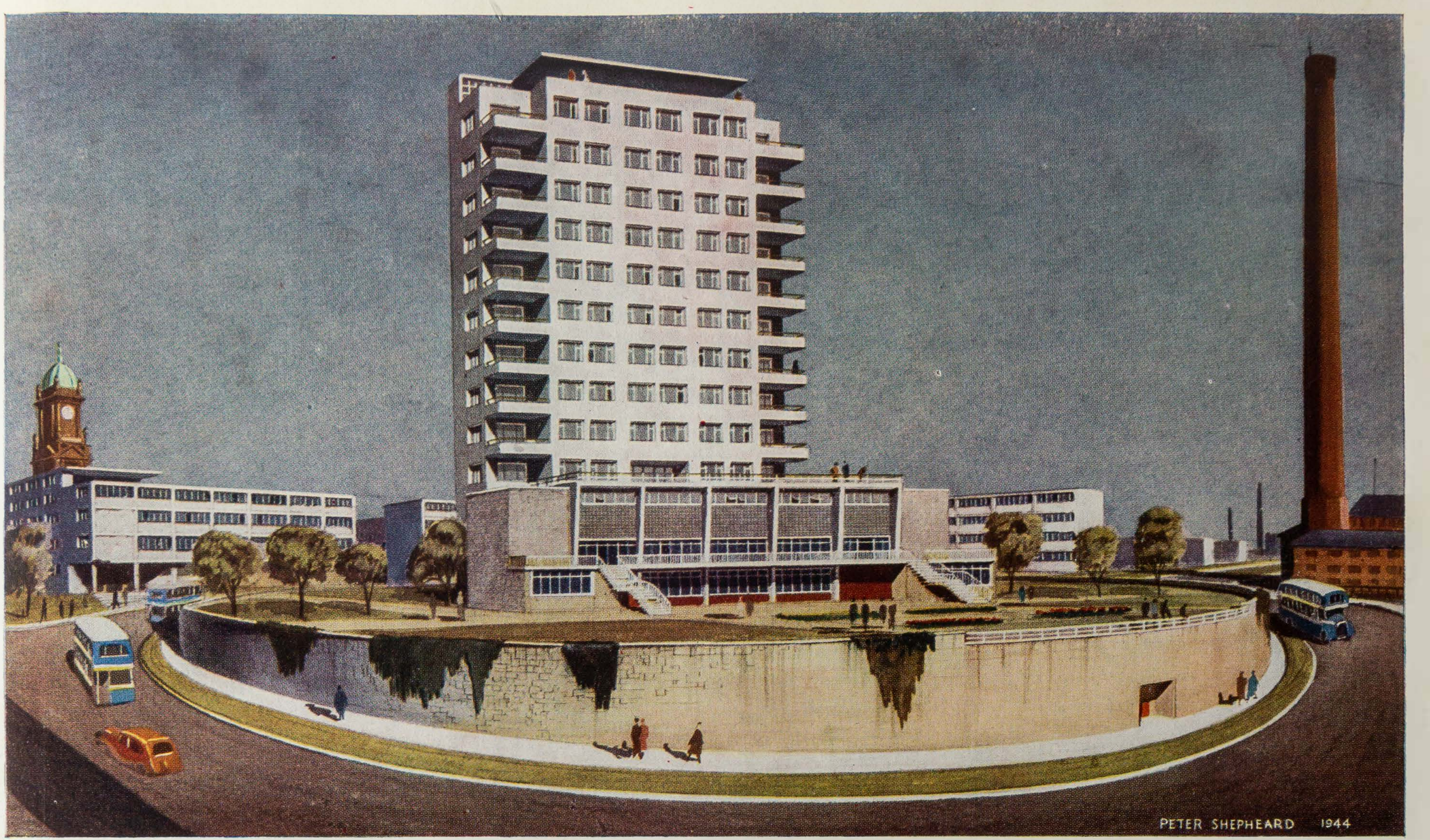
The above facts having we think been established, we suggest that, for the good of the town as a whole and to make the streets brighter, a remission of rates up to 6d. in the pound sterling be granted to all buildings using white mortar originally, or to those which are repointed every five years in white mortar (see 68 Argyle Street).

Advertisements and Painting

We suggest, in its own and its traders' interests, that the town should control advertisements, placing a limit everywhere, at the discretion of the Borough Architect, to the size of letters.

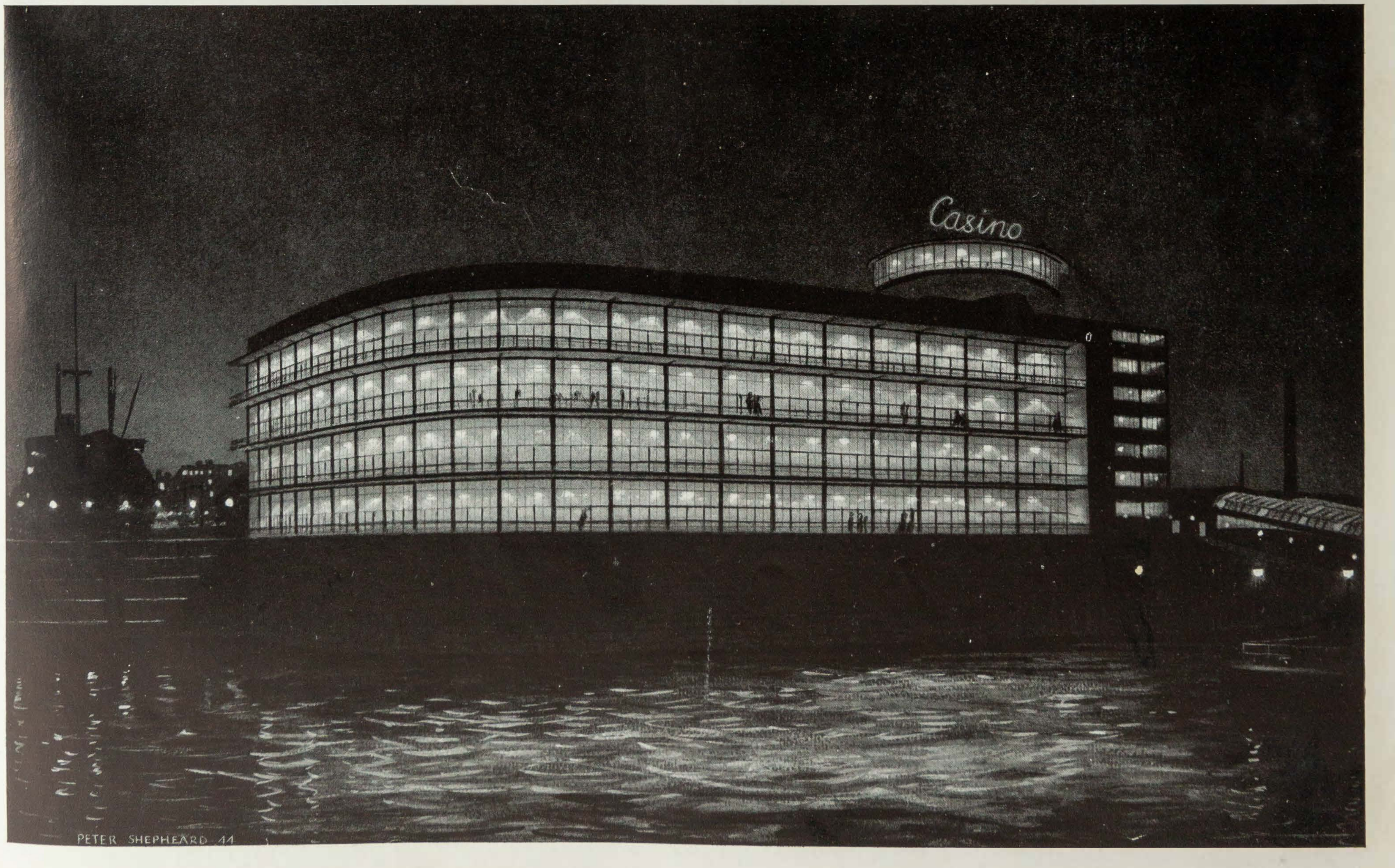
We suggest further, in order to brighten the town and to make it more attractive to industrialists and others seeking to use it, that places like Hamilton Square, parts of Hamilton Street and Argyle Street and other places where the architecture is uniform, be, like the Brunswick Terraces and Square at Hove, Sussex, repainted alike every three years to the Corporation's tints, and that as an inducement a similar remission of rates up to 6d. in the pound sterling be granted to the owners of such houses as agree to have all paintwork being repainted at a time and to a tint issued by the Borough Architect. Lamp-posts, bus shelters, railings and other town property should be similarly treated under his jurisdiction.

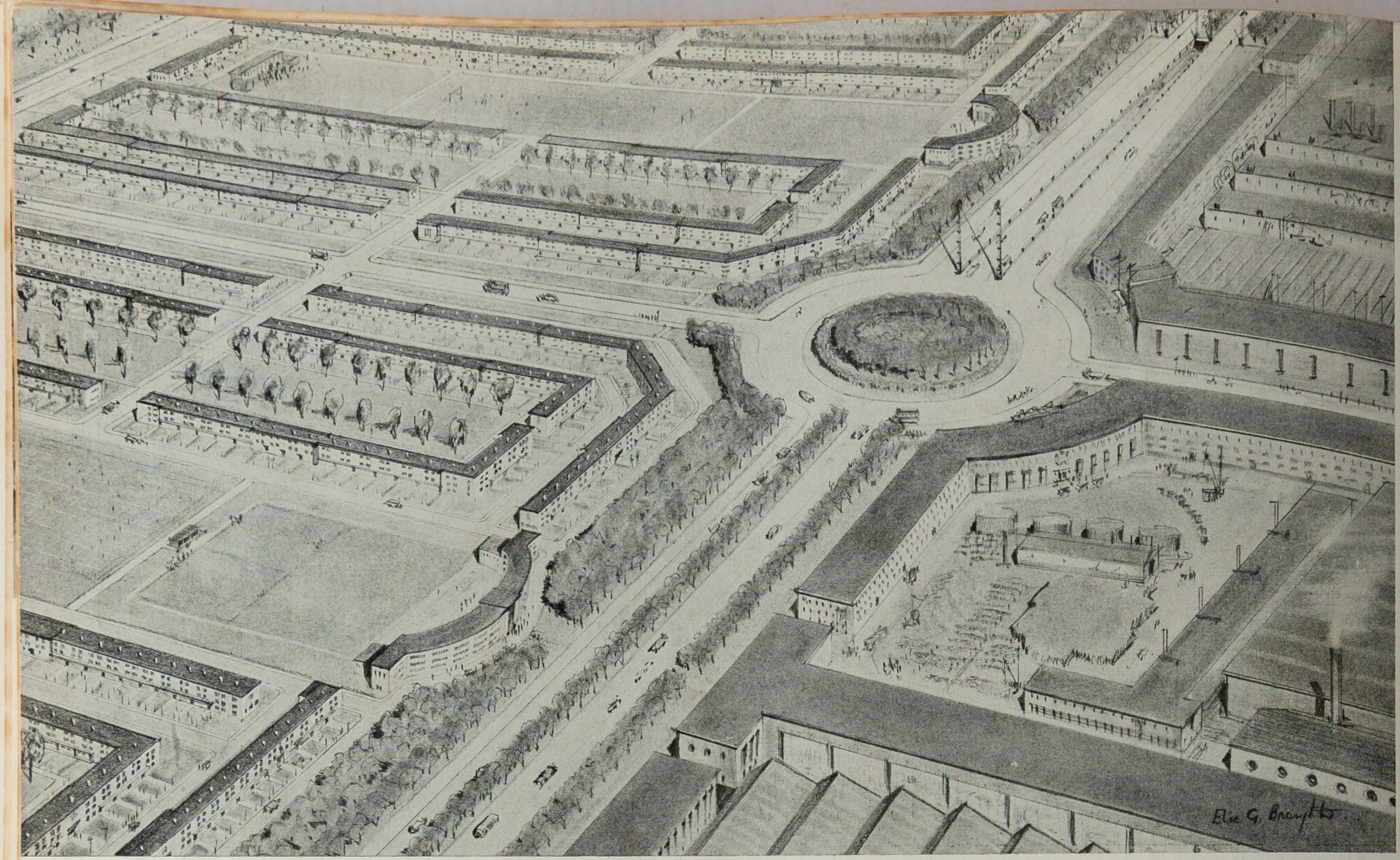
While the higher residential parts of the town can perhaps be left to look after themselves, it seems clear to us that in the public interest the lower town requires a great deal of supervision. At present it is deteriorating both from want of plaster and of paint to reveals of windows, of paint to the windows themselves, to doors, balconies, etc., and because such painting, when done, is done in ways too varied for the public interest. Everyone seems to



A SUGGESTION FOR A NEW WOODSIDE HOTEL. It abuts a main line railway terminus which could well become, with the construction of a Channel Tunnel, the western end of the European railway system.

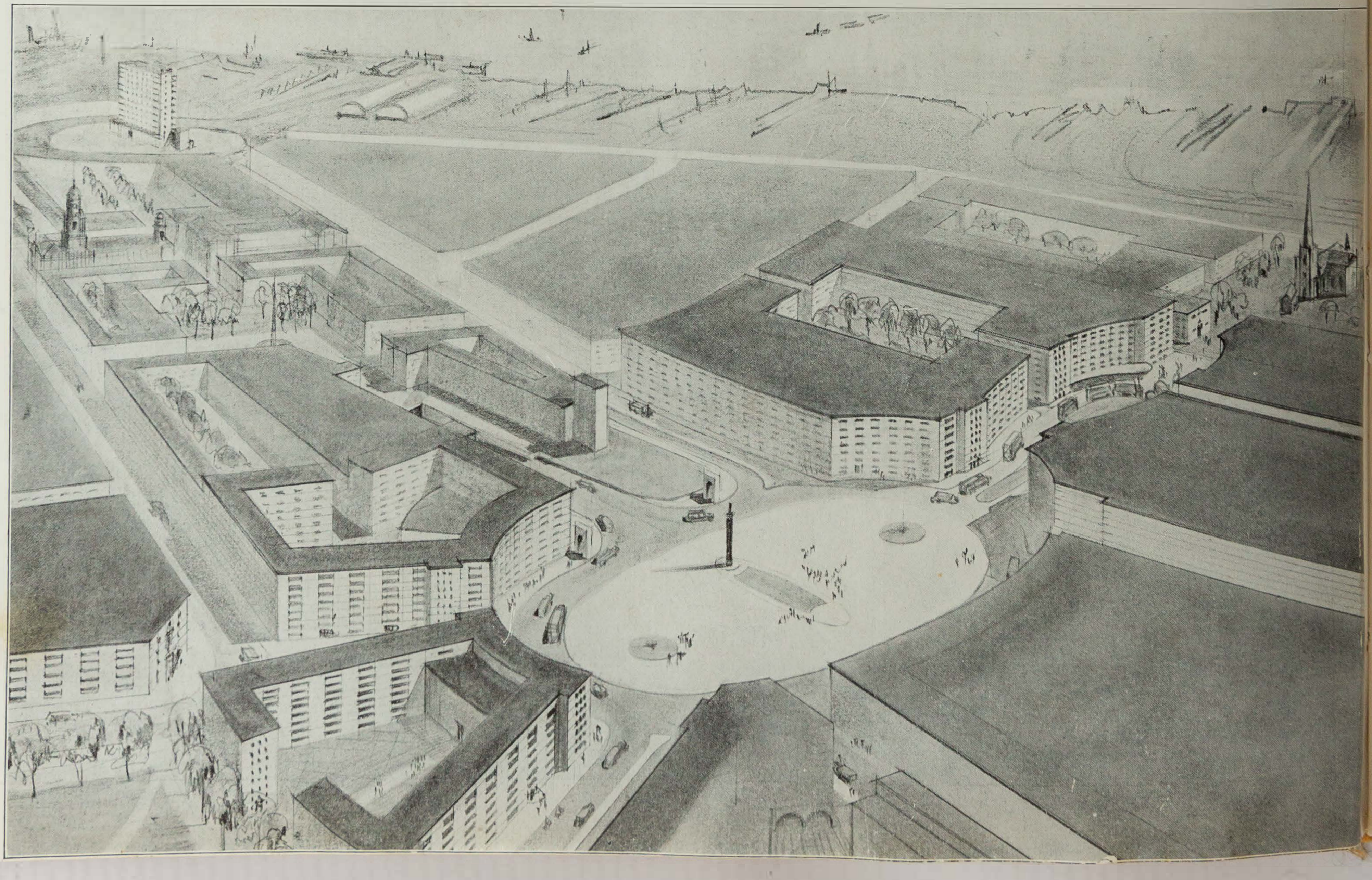
A SUGGESTION FOR A CRYSTAL PALACE on the Woodside water-front which could become a very profitable civic undertaking.





PROPOSED TUNNEL TO WALLASEY. From the Victoria Roundabout in the New Price Street Arterial Road this tunnel will provide a direct link with Wallasey and supersede the existing interrupted bridge roads.

PROPOSED TUNNEL ENTRANCE *PLACE*—a fine architectural opportunity. This panoramic view also shows Woodside and the New Hotel (top left) and the Priory and proposed Long Distance Bus Station (right).



be a law unto himself, and the point of view of the public, once so important here as elsewhere, is not now sufficiently considered.

As a start in rehabilitating the town, we suggest that the Corporation, after agreement over lettering and painting is obtained, sand blast the whole of Hamilton Square and the Town Hall. This should be done at once, or when the corners of the Square are built-up, as suggested on the plan (Map 50, page 73 and illustration on page 77). If they are not built-up then sand blasting should nevertheless be done. We suggest further that the opportunity be taken to remove the inappropriate Gothic monument, a later addition, in the centre of the Square, and that it be re-erected elsewhere, such as near the Priory. When this is done the Square should be restored to its original grass and flower beds and the stunted trees removed.

ARCHITECTURAL OPPORTUNITIES

Special Architectural Opportunities

(1) The large oval *place*, suggested to take the place of the present irregular shapes at the main tunnel entrance, offers a fine architectural opportunity, though it is hoped that simple horizontal window lines and a level main cornice preserving the shape will represent the chief features. Such an oval *place*, itself, like Hamilton Square, would be a great town improvement (See Map 50, page 73 and illustration at foot of opposite page).

(2) The large hotel facing the river proposed for the Woodside island site, in grounds on a raised platform to avoid noise, as has been done by Unilevers on the Thames Embankment, offers a great architectural opportunity. It will be the only first-class hotel on Merseyside facing the river. The Great Western Railway Company have agreed that their service from London could be shortened by approximately two hours, and this possibility makes such an hotel a first-class proposition. (See Map 50, page 73, and illustration on page 119).

(3) The rebuilding of the Bus and Ferry Stations and the Railway Approach at Woodside to be done at the same time as No. 2, and by the same architect (See Map 50).

(4) The tall glass and steel building, Birkenhead's Crystal Palace, suggested on the present Corporation yard, for cafes and dance hall, from the terraces of which Birkenhead residents will be able to see the river and its shipping in daylight, and where Liverpool residents can dance at night, being attracted by the path of light it will make over the Woodside Ferry to the Liverpool Landing Stage (see illustration on page 119).

(5) The rebuilding of offices and garages for the Corporation buses in New Bridge Street, and the long distance bus station at the Tunnel *Place*.

(6) The rebuilding of the two General Hospitals and other health establishments as a unit of 1,000 beds on the Mere Hall site facing south and west (see Appendix No. 23), and the laying out of the present infirmary site as a Park and View point.

(7) The suggested hexagonal courts (Maps 57-61, pages 88-90), the Wallasey Tunnel Entrance in Price Street, the new blocks of offices and flats suggested for so many places on the Plan, and the extensions of the Town Hall. The Riverside Park and Drive, the extensions to the Bidston Hill Park, the widened roads and pathways, offer opportunities not only to the architect and engineer, but to the landscape architect as well.

Trees

To the landscape architect, however, every road where trees and grass are possible offers opportunities for working with the Corporation Architect and, as will be seen from the Plan, examples of such opportunities have been indicated (See Appendix No. 19 from the Curator at Kew Gardens and the Appendix on width of roads No. 9).

APPENDICES

APPENDIX No. 1

BUILDINGS OF HISTORIC AND ARCHITECTURAL INTEREST

(to be protected, it is suggested by the 1944 Act)

According to a list prepared jointly with the Ministry of Works.

1. *Parish Church of St. Mary, Birkenhead.*

   Date 1819-1822.

   Plan Cruciform.

   Style Victorian Gothic. This was the first church to be built in modern Birkenhead. The Chapter House of the Priory previously served the scattered population of the parish as a place of worship (Birkenhead Chapel). The earliest recognisable date on any gravestone is 1782.

2. *Parish Church of St. Oswald, Bidston.*

   Date Tower about 1520, main body of Church rebuilt 1856 on similar lines to the previous structure.

   Style Late perpendicular.

3. *Parish Church of Holy Cross, Woodchurch.*

   Date Tower 14th Century with later casings; south aisle late perpendicular. North wall contains all that remains of Norman work, notably an early window surmounted by a wheel cross, and four square-headed windows.

   Churchyard contains remains of mediæval cross, reconstructed to form a sundial.

   Interesting carved pew ends in Choir.

4. *The Priory (remains of).*

   Date Architectural remains mid-12th to late 14th Centuries.

   Type A rather small Benedictine House, possibly located here to command a ferry crossing so that the monks could practice the traditional hospitality of their Order.

   Founder Hamo de Mascy of Dunham, a " Baron " of the Earl of Chester.

   Present situation Between Priory Street and Church Street to west and east, and Abbot Street and Abbey Street to north and south.

   Parts remaining Chapter House. Built in Norman style with second floor added in the 14th Century. Crypt. There are also traces of the cloister wall and the doorway to the north of the Chapter House, walls, etc., to the Guest House and the Prior's Lodging.

   Condition The upkeep of the Priory rests with the Corporation of Birkenhead, who seem a little indifferent as to its welfare. The graveyard, in which a number of eminent citizens of the town have been buried, is neglected.

5. *Hamilton Square.*

   Date 1826-1850, except for the Town Hall.

   This fine square was the work of a Scottish architect, Gillespie Graham, who took an Edinburgh square for a model; the project also owed much to William Laird, one of the pioneers of the town.

   The Square did not long fulfil its original purpose, that of a good residential area, and it is now mainly given over to business. The central position on the east side was reserved for a Town Hall, opened in 1887 and since partly rebuilt after a fire. The central green space, originally enclosed for the benefit of private residents, was purchased by the Corporation in 1903 and laid out as a public garden. The Square, some six acres in extent and with the Town Hall as its focal point, serves as an admirable centre for civic celebrations, notably when it is illuminated.

6. *Conway Street Gates, Birkenhead Park.*
Land was purchased for this park in 1843, under the Third Improvement Act. Originally 70 acres were to be set aside for the park. This was later extended to 226 acres purchased, of which 125 acres were appropriated for public use for ever. The Park was laid out by Sir Joseph Paxton, the famous architect of the Crystal Palace, assisted by Mr. Edward Kemp, head park-keeper. Conway Street entrance has a frontage of 125 ft., with a central archway 18 ft. wide. The Ionic Order of Architecture has been adopted. The architect's name is unknown.

7. *The Cottage, Tollemache Road, Birkenhead.*
Date Mid-16th Century.
This building was a tied cottage of Toad Hole Farm, which stood half-way along Bidston Avenue. The holding farmed 44 acres in 1824, when it was tenanted by Mary White. The cottage has charming stone mullioned windows and the original stepped chimneys.
Position. Corner of Bidston Avenue and Tollemache Road.

8. *Oxton Hall, Oxton.*
Date Approximately 1660.
This small Jacobean cottage is presumed to have been the original Oxton Old Hall. It has original stone window reveals and one bedroom interior wall which shows traces of the original design on the plaster.

9. *Bidston Hall.*
Date Believed to have been rebuilt 1620 by William, Sixth Earl of Derby.
It was originally a country seat of the Stanley family and has been associated with historic names. It is now a farm. The original roof was in four gables, now replaced by one ridge running the opposite way. The chimneys have been shortened, and an interesting summer house in the shape of an ace of clubs has gone.

10. *The Old Vicarage, Bidston* (Present suburban address " The Lilacs," Bidston).
Date Approximately 1687—1700.
This dwelling was never a vicarage but its position near the Church probably gave it its name. It possesses stone mullions to the windows and a large tithe barn at the back. Alterations have been made carelessly and the house is not in a very good state of repair.

11. *The Church Farm, Bidston.*

APPENDIX No. 2

PLACES OF WORSHIP

Birkenhead has probably as many churches and places of worship as any other town of comparable size. In the early stages of its modern growth, much care has been given to the siting of the larger churches ; roads, park, and churches appear to have been laid out in advance of housing, shopping and business development (see Historical Map No. 5, page 2).

This ample provision for public worship is exemplified in the many existing centres. There are some 90 churches embracing more than 20 different denominations within the borough boundary today, having a total seating capacity of approximately 41,000, (this includes halls and schools attached to the many churches) or of about one-third of the population. From information received and observations made in connection with some 20 churches of different denominations, it appears that only about 35 per cent. of the available seating capacity is actually used, or that about 12 per cent. of the total population does engage in public worship on Sundays. These figures are not, of course, a true indication of the activities and services of the Churches, as they ignore midweek activities and meetings and extensive work among the youth of the district. They are purely indicative of the relationship between the average Sunday attendance, the total seating capacity, and the total population.

Architectural Style and Aesthetic Value

The older Anglican Parish Churches (erected 1820-75) are imposing, generally well designed and typical stone buildings of the period. The village parish churches such as Upton, Woodchurch and Bidston, are all good, the last two being (with the exception of the Priory) the oldest religious institutions in the Borough area. St. Laurence's, Park Street, a Roman Catholic church, very simple and severe is perhaps the best piece of modern ecclesiastical architecture in the town. The round ended chancel, finely decorated except for its reredos, is a beautiful piece of architecture. St. Saviour's (Anglican) Bidston Road, Oxton, if not so worthy in itself, is a fine red sandstone building and a notable Wirral landmark, commanding a magnificent outlook over many miles of countryside. Several other Roman Catholic Churches and Oxton Congregational Church are interesting, but, with few exceptions, the remainder of the churches built during the nineteenth century are mediocre or poor æsthetically. For more detailed description of the churches listed by the Ancient Monuments Branch of the Ministry of Works see the Appendix on " Buildings of Historic and Architectural Interest."

Of the twentieth century churches, St. Stephen's (Anglican) Parish Church, Prenton, constructed in warm, red sandstone and designed in the modern manner, is good. Another, in brick and not yet completed, is the Baptist Church in Whetstone Lane.

Physical State of Repair

Ninety-two churches and places of worship have been visited and inspected and have been classified according to their state of repair as follows :—

Excellent	7
Very Good	29
Good	20
Fair to bad	The remainder

Age is the main determinant of the state of repair and unfortunately has little relationship to æsthetic worth especially in the nineteenth century ; there are churches which deserve to last for all time, and, on the other hand, one or two recent ones which have little or no architectural merit.

Seven churches are not in use at present owing to damage by enemy action (one is totally destroyed and at least one other will probably have to be demolished) and six others have suffered varying damage but have been temporarily repaired and are being used.

Several churches in the built-up central area have succumbed to the unfortunate modern trend of decentralisation and are now used for secular or storage purposes. One great advantage of the replanning of central areas of towns is that the hitherto inevitable wastage of buildings and services, caused by the gradual movement of the population to the outskirts and suburbs, will be arrested. There are several mission halls, mainly in the poorer parts of the Borough, which are derelict or used for other purposes; this occurs in every industrial town and is mainly due to spiritual decay and decline in membership.

Effect of the Replanning Scheme on the Churches

In the preparation of the Replanning Scheme it has been the policy to interfere as little as possible with places of worship except in such cases where a weak spiritual cause, physically decaying premises and the over-riding needs of detailed re-arrangement makes some alteration necessary.

It is to the common disavantage to maintain a large church on a valuable central site if it cannot be justified by human need. In one such case, where the congregation is considering amalgamation with a neighbouring church, it has been deemed advisable to utilise the site for future business purposes.

In the detailed replanning of the Central, Academic and Shopping Centres and in the Neighbourhood Unit areas, each church, and, where possible, the state of the spiritual cause, have been examined and those of definite spiritual, architectural or physical value (or a combination of these) are retained in the scheme. For the actual churches affected in these parts see the plans and the detailed description of each area in the Report.

As few churches are being adversely affected by the plan there is limited site reservation for new places of worship. One site has been so reserved in the Central Conway Neighbourhood Unit and in the Academic Area (this latter specifically for the rebuilding of a temporary church which will have to make way for the new Park-Library Crescent). Four sites for new churches and one old church have been reserved in the preliminary layout of the Woodchurch Estate. Some smaller mission halls may be required in the future (these need only comparatively small sites and can be introduced with no harm into almost any zoned area), but, as it is impossible to ascertain the future demand for these, it has been thought best not to allocate special sites to them.

The location of all the churches may be seen in the Civic Survey Map, No. 18 (page 24), and the names and details in Appendix, No. 3.

APPENDIX No. 3

SCHEDULE OF CHURCHES

A. Table showing the approximate growth of churches in relation to Population—

Denomination	No. of Churches (cumulative)									
	1830	1860	1880	1890	1900	1910	1920	1930	1940	1945
Anglican	3	10	16	20	21	23	23	23	23	23
Non-Conformist	1	8	21	27	39	46	49	52	55	55
Roman Catholic	0	1	2	4	6	7	7	8	8	8
Totals	4	19	39	51	66	76	79	83	86	86
Population (thousands)	4	51	84	100	110	129	152	152	134	116
Persons per Church	1000	2680	2150	1960	1670	1690	1920	1840	1560	1350

B. List of existing Churches

†Listed by the Ancient Monuments Branch of the Ministry of Works.

Denomination	Name and Location	Built	Age	Seating	Repair	Remarks
Anglican	Holy Cross, Woodchurch	c1400	500+	400	Very good	†
„	St. Oswald, Bidston	c1520	400+	330	„ „	†
„	St. Mary's, Birkenhead	1819	126	810	„ „	†
„	Holy Trinity, Price St.	1840	105	750	Good	
„	St. Peter-on-the-Rock, Rock Ferry	1842	103	750	Damaged	
„	St. John's, Grange Road	1845	100	850	Good	Island site
„	St. Anne's, Beckwith Street	1847	98	750	Very good	
„	Christ Church, Claughton	1849	96	1430	„ „	
„	St. Paul's, Tranmere	1855	90	520	„ „	
„	St. James', Laird Street	1858	87	650	„ „	*Island site
„	St. Barnabas, Rock Ferry	1862	83	425	„ „	
„	St. Paul's, Argyle Street	1863	82	1200	Fair	Interesting Plan
„	St. Peter's, Cathcart Street	1867	78	894	Very good	
„	St. Mary's, Upton	1868	77	350	„ „	
„	All Saints, Shrewsbury Road	1870	75	400	„ „	
„	St. Catherine's, Higher Tranmere	1875	70	800	Good	
„	St. Luke's, Lower Tranmere	1881	64	450	Good	
„	St. Bede's Mission, Claughton	1888	57	300	Damaged	
„	St. Mark's, Devonshire Road	1890	55	700	Very good	
„	St. Saviour's, Oxton	1890	55	700	Excellent	Fine land mark
„	St. Michael and All Angels, Claughton	1895	50	850	Good	
„	St. Matthew's, Park Road East	1909	36	500	„	
„	St. Stephen's, Prenton	1909	63	550	Excellent	Good Architecture
Roman Catholic	St. Werburgh's, Grange Road	1837	108	450	Good	
„	Church of Our Lady, Price Street	1862	83	650	Damaged	
„	St. Anne's, Rock Ferry	1887	58	600	Very good	
„	St. Laurence's, Park Street	1889	56	600	„ „	The best designed Church in the town.
„	Holy Name of Jesus, Beresford Road	1899	46	200	„ „	
„	St. Joseph's, North Road	1900	45	500	„ „	
„	Holy Cross, Hoylake Road	1930	15	400	Poor	
„	St. Joseph's, Upton	—	—	250	—	Part of Convent
Presbyterian	St. Andrew's, Conway Street	1840	105	736	Good	
„	Grange Road West	1848	97	619	Fair	

APPENDIX No. 3—*(Contd.)*

Denomination	Name and Location	Built	Age	Seating	Repair	Remarks
Presbyterian	New Chester Road, Rock Ferry	1858	87	600	Very good	
"	Trinity, Beresford Road	1866	79	820	" "	
"	Mission, St. Paul's Road, Rock Ferry	1866	79	250	Fair	
"	Brassey Street Institute	1878	67	225	Poor	
"	St. Paul's, North Rd., Higher Tranmere	1900	45	535	Good	
"	Ford Road, Upton	1900	45	200	"	
"	Stuart Road	—	—	250	Fair	
"	Hamilton Memorial, Claughton Village	1922	23	380	Excellent	
"	Willmer Road	1901	44	550	Fair	
Methodist	Brunswick, Price Street	1830	115	765	Good	
"	Wesley, Church Road, Tranmere	1862	83	1027	Fair	
"	Trinity, New Chester Rd., Rock Ferry	1866	79	800	Fair	
"	Grange Road	1870	75	800	Good	
"	Palm Grove	1871	74	615	Very good	
"	Hind Street	1873	72	278	Poor	
"	Lowe Street	1878	67	173	Poor	
"	Wesley Hall, Marne Street	1889	56	150	Fair	
"	Mount Tabor, Holt Road	1879	66	600	Very good	
"	Freehold, Old Chester Road	1890	55	250	Poor	
Congregational	Oxton Road	1858	87	540	Very good	
"	Highfield Road, Rock Ferry	1870	75	814	Excellent	
"	Old Chester Road, Tranmere	1901	44	560	Very good	
"	Prenton Road West	1908	37	350	" "	
Baptist	Park Grove, Whetstone Lane	1896	49	85	Fair	
"	Bedford Road, Rock Ferry	—	—	300	Poor	
"	Laird Street	1910	35	350	Damaged	
"	Whetstone Lane	1939	6	—	Excellent	Not yet completed
Welsh Presbyterian	Parkfield Avenue	1837	108	560	Very good	
"	Laird Street	1905	40	400	" "	
Welsh Congregational	Clifton Road	1881	65	650	" "	
Welsh Baptist	The Woodlands, Lowwood Grove	1889	56	300	Good	
Welsh Church of England	St. Winifreds, Westbourne Road	1891	54	250	Fair	
Welsh Methodist	Woodchurch Road	1906	39	250	"	
Welsh Methodist	Claughton Road	—	—	—	"	
Welsh Methodist	New Chester Road	—	—	250	Fair	
Salvation Army	Oriel Hall, Old Chester Road	—	—	200	Poor	
"	Salisbury Street (Grange Road)	1939	6	300	Excellent	
Plymouth Brethren	Atherton Hall, Charing Cross	1882	63	150	Fair	
"	Hampden Road, Tranmere	1882	63	400	Good	
"	Ebenezer Hall, Ebenezer Street	—	—	150	Fair	
"	Harrowby Hall, Harrowby Road	—	—	100	"	
"	Milner Hall, Milner Street	—	—	200	Good	
"	Spenser Hall, Spenser Avenue	—	—	250	Fair	
Catholic Apostolic	Park Road South	—	—	—	"	
Christian Science	Village Road, Oxton	—	—	—	"	
Church of Christ	Grange Road West	1924	21	300	"	
Church of God	Egan Road, (Hoylake Road)	1931	14	150	Fair	
Society of Friends	Slatey Road (Park Road South)	1891	54	200	Very good	
Jehovah's Witnesses	Kingdom Hall, Price Street	—	—	120	Fair	
Spiritualist	Hamilton National, Oliver Street	1846	99	600	Poor	

APPENDIX No. 3—*(Contd.)*

Denomination	Name and Location	Built	Age	Seating	Repair	Remarks
Unitarian	Bessborough Road	1851	94	550	Very good	
Undenominational	Charles Thompson's Mission, Hemingford Street	1854	91	450	Good	
”	Emmanuel, Claughton Road ..	1911	34	500	Very good	
”	Maitland Mission, Storeton Road ..	1929	16	250	Excellent	

In addition there are several small independent missions (about which no information could be obtained), a synagogue and domestic premises used as meeting places for Christadelphians and Theosophists.

APPENDIX No. 4

LOCAL UNEMPLOYMENT INDEX

Yearly Average Figures, 1927-1939

Year	BIRKENHEAD			Great Britain
	Average Yearly Male Unemployment %	Average Yearly Female Unemployment %	Average Yearly Unemployment %	Average Yearly Unemployment %
1927	19.7	6.5	18.1	—
1928	17.8	9.1	16.1	10.6
1929	17.7	11.8	16.7	10.6
1930	25.7	21.1	24.6	16.2
1931	38.0	27.5	35.6	22.0
1932	40.1	22.5	36.2	22.0
1933	35.3	21.1	32.4	20.3
1934	31.6	19.9	29.3	17.3
1935	31.2	18.9	29,3	16.2
1936	25.2	17.6	23.9	13.9
1937	23.8	18.6	22.9	10.7
1938	21.8	14.6	20.6	12.7
1939	21.3*	11.8*	19.5*	11.3*

N.B.—*Average taken for 6 months between January and August (May and June omitted).

APPENDIX No. 5

UNEMPLOYMENT INDEX FIGURES, 1927/1939

Year	Quarter Ending	BIRKENHEAD			Percentage Unemployment Merseyside (yearly)	Quarterly Average Percentage Unemployment Great Britain
		Percentage Unemployed	Quarterly Average Unemployed Percentage	Quarterly Average Male Workers Unemployed Percentage		
1927	March	16.6	18.8	21.1		
	June	16.9	16.1	18.3		
	September	19.4	11.8	20.2		
	December	16.2	16.3	19.0		
1928	March	15.1	16.0	17.4		10.0
	June	16.5	15.8	17.5		9.8
	September	17.3	16.9	19.2		11.2
	December	14.2	15.7	17.1		11.5
1929	March	14.4	14.9	15.4		11.7
	June	16.4	16.8	18.2	16.5	9.8
	September	18.8	17.1	18.4		10.0
	December	17.2	18.1	18.9		10.9
1930	March	20.0	20.1	20.8		13.1
	June	23.4	21.7	22.6		15.0
	September	26.4	24.0	25.2		17.3
	December	35.5	32,7	34.2		19.3
1931	March	36.8	35.6	34.1		21.9
	June	34.2	35.1	34.2		21.4
	September	37.3	35.2	37.7		22.9
	December	35.4	36.8	39.4		22.2
1932	March	38.4	37.6	41.2		21.6
	June	35.6	37.3	41.7	27.8	21.9
	September	33.9	34.8	38.1		22.9
	December	35.4	35.7	39,3		22.3
1933	March	34.6	35.7	38.5		22.9
	June	29.8	31.9	35.0		20.7
	September	31.5	31.7	33.3		19.3
	December	29,6	30.6	33.8		18,2
1934	March	29.9	32.4	35.0		18.5
	June	27.6	28.2	30.8		16.9
	September	29.0	28.3	30.4		16.9
	December	28.2	28.8	30.4		16.9
1935	March	29.5	30.9	32.7		17.9
	June	26.7	27.7	29.4		16.1
	September	32.1	29.4	31.7		15.6
	December	27.8	29.3	31.1		15.1
1936	March	26.4	28.7	30.6		16.0
	June	22.8	24.2	25.7		13.8
	September	21.1	21.1	22.2		12.9
	December	20.8	21.4	22.1		12.8
1937	March	22.5	23.7	25.1		11.9
	June	23.7	23.5	23.4		10.4
	September	21.5	22.3	23.0		9.9
	December	21.6	22.1	23.6		10.8
1938	March	20.4	21.5	22.4		12.7
	June	20.5	20.5	21.6		12.7
	September	19.4	18.9	20.1		12.8
	December	22.9	21.7	23.1		12.6
1939	March	19.2	21 2	23.1		13.0
	June	20.2				

APPENDIX No. 6

NUMBER OF EMPLOYMENT BOOKS EXCHANGED AT BIRKENHEAD.

1929 — 1939 — 1943

Industry	1929			1939			1943		
	M.	F.	T.	M.	F.	T.	M.	F.	T.
ALL INDUSTRIES	29,887	5,387	35,274	33,877	9,262	43,139	29,599	12,350	41,949
Building	2,426	26	2,452	2,345	28	2,373	900	26	926
Public Works Contracting	1,152	1	1,153	785	1	786	214	9	223
Shipbuilding and Repairing ..	9,360	130	9,490	11,532	132	11,664	15,020	407	15,427
General Engineering	830	49	879	755	35	790	1,020	844	1,864
Electrical, Wiring, Contracting, and Engineering	81	10	91	284	25	309	410	25	435
Marine Engineering	340	1	341	594	3	597	784	6	790
Motor Vehicles and Aircraft Construction	278	21	299	283	38	321	501	1,142	1,643
Sawmilling	160	9	169	592	11	603	51	13	64
Oil, Glue, Soap, Matches, etc. ..	608	263	871	499	205	704	335	409	744
Laundry, Dry Cleaning, etc. Service	48	211	259	271	880	1,151	104	904	1,008
Railway Service	650	58	708	719	48	767	781	549	1,330
Tramway and Omnibus Service ..	10	2	12	375	13	388	196	316	512
Road Transport (other than above)	494	19	513	389	11	400	250	18	268
Shipping Service	2,423	41	2,464	1,116	21	1,137	407	125	532
Harbour, River, and Canal Service Port Transport	2,622	19	2,641	2,581	10	2,591	2,515	16	2,531
Printing, Publishing and Bookbinding	213	182	395	232	220	452	159	168	327
Bread, Biscuits, Cakes, etc.	147	219	366	206	177	383	141	135	276
Grain Milling	58	12	70	493	73	566	462	237	699
Drink	310	131	441	249	136	385	—	13	13
Gas, Water and Electricity	674	11	685	676	20	696	356	93	449
Distributive Trades	3,608	2,582	6,190	4,568	3,446	8,014	2,006	3,368	5,374
National Government Service ..	67	39	106	203	74	277	160	397	557
Local Government Service ..	1,235	49	1,284	808	359	1,167	2,285	2,172	4,457
Professional	153	87	240	197	282	479	84	209	293
Entertainment and Sport	149	128	277	314	1,286	1,600	77	154	231
Other Industries and Services ..	1,791	1,087	2,878	2,811	1,728	4,539	381	595	976
ALL INDUSTRIES	29,887	5,387	35,274	33,877	9,262	43,139	29,599	12,350	41,949

APPENDIX No. 7

DISTRIBUTION OF INDUSTRIAL POPULATION, 1931

	Birkenhead			England and Wales		
	Males	Females	Total	Males	Females	Total
Population	70,855	76,948	147,803	19.133,010	20,819,367	39,952,377
Aged 14 years and over Total	52,326	58,760	111,086	14,632.859	16,410,894	31,043,753
Unoccupied and retired	4,461	39,548	44,009	1,385,526	10,804,851	12,190,377
Out of work	12,043	2,124	14,167	1,683,742	483,064	2,166,806
In industries	35,822	17,088	52,910	11,563,591	5,122,979	16,686,570

Census Order	Occupation	1921				1931				Increase or Decrease	
		Birkenhead		England and Wales		Birkenhead		England and Wales			
(a)	(b)	Nos. (c)	% (d)	Nos. (e)	% (f)	Nos. (g)	% (h)	Nos. (i)	% (j)	Nos. (k)	% (l)
	TOTAL FOR ALL INDUSTRIES	45,491	100.0	17,178,050	100.0	52,910	100.0	16,686,570	100.0	7,419	16.3
I	Fishing	10	0.0	40,246	0.2	32	0.0	35,535	0.2	22	220.0
II	Agriculture	159	0.3	1,123,962	6.5	473	0.9	961,290	5.8	314	197.4
III	Mining and Quarrying	14	0.0	1,283,728	7.5	81	0.1	984,014	5.9	67	478.6
IV	Bricks, Pottery, Glass	27	0.1	176,541	1.0	91	0.2	184,389	1.1	64	237.0
V	Chemicals, Dyes, Paints, etc.	670	1.5	197,677	1.2	2,604	4.9	192,512	1.1	1,934	288.6
	Chemicals	69	0.1	85,243	.49	189	0.4	89,047	0.5	120	173.8
	White Lead, Paint, Varnishes, etc.	51	0.1	20,753	.12	85	0.1	25,011	0.1	34	66.6
VI	Metals, Machines, Jewellery, etc.	13,324	29.3	2,196,014	12.8	4,501	8.5	1,761,800	10.6	—8823	—66.2
	General Engineering	509	1.1	529,826	3.1	516	0.9	380,750	2.3	7	1.37
	Shipbuilding and Repairs	11,807	25.9	283,443	1.6	2,868	5.4	118,096	0.7	—8939	—75.7
VII	Textiles and textile goods ; Cellulose	419	0.9	1,153,829	5.7	371	0.6	964,005	5.8	—48	—11.4
VIII	Skins and Leathers	174	0.4	80,472	0.5	249	4.7	74,368	0.4	75	43.1
IX	Clothing	1,070	2.4	805,678	4.7	878	1.1	777,767	4.6	—192	—18.4
X	Food, Drink, Tobacco	1,743	3.9	540,718	3.2	2,336	4.4	558,972	3.3	593	34.0
	Grain Milling	418	0.9	44,475	0.5	636	1.0	34,542	0.2	218	52.1
XI	Woodworking, Furniture, Cane and Basket Ware	568	1.2	261,856	1.5	508	0.9	238,803	1.4	—60	—10.6
	Sawmills and Joinery	248	0.5	79,915	4.6	104	2.2	38,540	0.2	—144	—58.0

XI	Woodworking, Furniture, Cane and Basket Ware ..	568	1.2	261,856	1.5	508	0.9	238,803	1.4	—60	—10.6
	Sawmills and Joinery	248	0.5	79,915	4.6	104	2.2	38,540	0.2	—144	—58.0
XII	Paper Making, Stationery, Printing, etc.	436	0.9	356,808	2.1	737	1.4	411,121	2.5	301	69.3
XIII	Building, Contracting, etc.	1,447	3.2	726,368	4.2	2,641	4.9	846,793	5.0	1,194	82.3
XIV	Other Industries	120	0.3	185,022	1.1	264	0.5	184,920	1.1	144	120.0
XV	Gas, Water, Electricity	716	1.5	162,767	1.9	906	1.7	209,707	1.3	190	26.5
XVI	Transport and Communications	6,801	14.9	1,203,566	7.0	8,919	16.9	1,152,028	6.9	2,118	31.1
	Railway	2,795	6.1	548,673	3.2	2,357	4.4	477,961	2.9	—438	—15.6
	Road	1,118	2.4	296,513	1.7	1,344	2.5	414,508	2.5	226	20.2
	Water	1,356	2.9	186,524	1.0	2,727	5.1	127,901	0.8	1,371	101.1
XVII	Commerce and Finance	7,366	16.3	2,275,148	13.2	12,536	23.6	2,769,366	16.6	5,170	70.3
	Horses, Cattle, etc.	178	0.3	37,541	0.2	185	0.3	30,685	0.2	7	3.9
XVIII	Public Administration and Defence	3,669	8.1	1,335,879	8.8	4,590	8.6	1,378,059	8.3	921	25.1
XIX	Professions	1,204	2.6	514,776	3.0	1,971	3.7	567,578	3.4	767	63.7
XX	Entertainment and Sport	286	0.6	122,004	.7	549	1.4	149,025	0.9	263	84.9
XXI	Personal Service	5,227	11.5	2,046,825	11.9	7,570	10.9	2,245,716	13.5	2,343	44.8
XXII	Other Industries	41	0.1	388,166	2.3	103	0.1	38,802	0.2	62	151.2
	TOTALS FOR ALL INDUSTRIES	45,491	100.0	17,178,050	100.0	52,910	100.0	16,686,570	100.0	7,419	16.3

APPENDIX No. 7

DISTRIBUTION OF INDUSTRIAL POPULATION, 1931

	Birkenhead			England and Wales		
	Males	Females	Total	Males	Females	Total

APPENDIX No. 8

SCHEDULE OF EXISTING AND PROPOSED INDUSTRIAL AREAS

Industrial No.	Dominant Existing User	Location	Individual Acreage	Total Acreage of existing Industry	Acreage of Proposed additional Industry	Total Acreage	15% Acreage for Amenities for proposed user	Proposed Industrial nett Acreage	Extra Employment on new nett Acreage @ 50% per Acre
1	Docks Warehousing and Industry	Fronting Wallasey Float :—							
		Between Wallasey Bridge Road, Beaufort Road and Cavendish Wharf Sidings	66						
		Between Cavendish Wharf, Corporation Road, Cathcart Street Sidings	60.3						
		All land fronting Wallasey Dock, Egerton Dock, Morpeth Dock, Morpeth Branch Dock	30.0	156.3					
		Between Borough Boundary, Wallasey Bridge Road and L.M.S. Railway	132.8		132.8	289.1	19.2	112.88	5644
2	Shipbuilding and Repair Yards	Fronting Mersey River :—							
		Between Woodside Station and Monks Ferry Terminus	10.0	112.19					
		Between Monks Ferry and Seafield House	102.19						
		Between Seafield House and Rock Ferry Pier	94						
		Triangular strip adjoining New Chester Road	0.8		94.8	206.99	14.2	80.6	4030
3	Ferries	Wallasey Landing Stage	1.4	4.8					
		Woodside Landing Stage	3.4			4.8			
4	Noxious Industry	Gasworks—Mollington Road and Brassey St.	13.1						
		Tannery and Glue Works—fronting New Chester Road	3.3	26.8					
		Lairage, Woodside	7.5						
		Bone Factory	2.9						
		Between New Chester Road, Railway and St. Paul's Road	11.5		12	38.8	1.8	10.2	510
		Between Glue Works and Tannery	0.5						
		Displaced—Abbattoir—New Chester Road	0.5						
5	Light and General Industry	Small Scattered sites	133.9	133.9					
		Between St. Paul's Road and Becford Road	25						
		Between New Chester Road and Church Street, adjoining Tunnel Place	20						
		Adjoining Central Station	8		133.4	267.3	20.01	112.39	5620
		Between Price Street and Cleveland Street	25						
		Between Railway and Beaufort Road	20						
		Between Bidston Village and G.W.R. land	35.4						
6	Heavy Industry	Between Cleveland Street and Corporation Road	36	19	17	36	2.55	14.45	722
7	Railways	London & North Eastern Railway	86.85						
		London Midland & Scottish Railway	64.6						
		Great Western Railway	31.6						
		Great Western and London & Midland and Scottish Joint	102.4	304.05					
		Mersey Railway	6.2						
		London Midland & Scottish and Mersey Railway Joint	5.0						

		Mersey Railway	6.2							
		London Midland & Scottish and Mersey Railway Joint	5.0							
		Cheshire Railway	7.4		3.5	307.55	0.5	3.0	150	
8	Proposed Temporary open space zoned for Industry later	Proposed, adjoining New Chester Road	3.5							
		Between Seafield House and St. Paul's Road and east of New Chester Road	15.0		25	25	3.75	21.25	1062.5	
		Between St. Paul's Road and Bedford Road east of Mersey Road	10.0							
9	Existing Industry to revert to open space later	Tile and Terra Cotta Works, Prenton Brick Works, Holm Lane	26.2 17.4	43.6		43.6				
10	Corporation Bus Offices and Garage		4.2		4.2	4.2	0.63	3.57	178	
		TOTAL	1223.34	800.64	422.7	1223.34	63.38	358.34	17916 *	

* The total number of persons employed in industry in Birkenhead, 1939, according to Employment Books exchanged, was 43,189 persons.
The total number of persons employed in existing and proposed industrial areas will be 61,105.

APPENDIX No. 8

SCHEDULE OF EXISTING AND PROPOSED INDUSTRIAL AREAS

Industrial No.	Dominant Existing User	Location	Individual Acreage	Total Acreage of existing Industry	Acreage of Proposed additional Industry	Total Acreage	15% Acreage for Amenities for proposed user	Proposed Industrial nett Acreage	Extra Employment on new nett Acreage @ 50% per Acre	
1	Docks Warehousing and Industry	Fronting Wallasey Float :— Between Wallasey Bridge Road, Beaufort Road and Cavendish Wharf Sidings Between Cavendish Wharf, Corporation Road,	 66							

APPENDIX No. 9 (Section 5)

MAIN ROADS

(See Map No. 45 page 45)

Road No.	Proposed Classification	Name of Road	Existing Classification if any	Location and Connections	Carriageway	Carriageway	Centre Reservation	Side Reservation	Total width of Road	Tree Planting	Remarks
1	2	3	4	5	6	7	8	9	10	11	12
1	Arterial Roads	New Chester Road	A 41	Birkenhead East Tunnel Place, New Ferry to Chester and Midland	Dual	30 ft. each	10 ft. 5 ft. min.	15 ft. each 12.5 ft. min.	100 ft. 90 ft. min.	Tree lined on both sides and shrubs in centre reservation	
2		Argyle St. Bye-pass	—	Tunnel *Place* and Price Street	Dual	27.5 ft. each	5 ft.	4.5 ft.	69 ft.		Side reservation to be used for road service only
3		Price St.	—	Lord St. to Beaufort Road	Dual	27.5 ft. each	28 ft.	15 ft.	113 ft.	Tree lined on both sides and in centre reservation	
4		Beaufort Rd.	—	Price St. and Wallasey Bridge Road	Dual	27.5 ft. each	5 ft.	12.5 ft.	85 ft.	Tree lined on both sides	
5		Bidston Bye-pass	—	Wallasey Bridge Road parallel to and north of Hoylake Road to west and south Wirral	Dual	27.5 ft. each	5 ft.	12.5 ft.	85 ft.	Tree lined where possible on both sides	
6		New Fender Valley Road	—	Birkenhead west parallel to Fender Brook to North Wales and Midland	Dual	30 ft. each	30 ft.	15 ft.	120 ft.	Tree lined on both sides and in centre reservation	
7	Sub-Arterial Roads	Borough Rd.	A 552	Tunnel *Place* to Bromborough and west Wirral up to Singleton Avenue.	Dual	22 ft. each	5 ft.	15 ft. 12.5 ft. min.	79 ft. 74 ft. min.	Tree lined on both sides	
7A		„	—	Singleton Avenue westward and Borough Road southward	Single	30 ft.	—	15 ft.	60 ft.	„ „ „	
8		Chester St.		Tunnel Place to Woodside	Dual	22 ft. each	10 ft.	15 ft.	84 ft.	„ „ „	
9		New Bridge Street		Canning St.—Bridge St. merger up to Lord Street	Dual	22 ft. each	15 ft.	15 ft.	89 ft.	—	
9A		Bridge St. and Corporation Road	A 5129 B 5146	Up to Beaufort Road	Single	30 ft.	—	15 ft.	60 ft.	—	
10		Birkenhead Upton Road	A 5027 B 5139	Junction of Price Street and Beaufort Road via Noctorum to Upton and west Wirral	Single	30 ft.	—	15 ft.	60 ft.	Tree lined on both sides	
10A		Upton Bye-pass	—	West of Upton Bridge	Single	30 ft.	—	15 ft.	60 ft.	„ „ „	

				west Wirral						
10A		Upton Bye-pass	—	West of Upton Bridge	Single	30 ft.	—	15 ft.	60 ft.	,, ,, ,,
11		Arrowe Park Moreton Road	A 551	Moreton to Thingwall and south Wirral	Single	30 ft.	—	15 ft.	60 ft.	,, ,, ,,
12		Old Chester Road	B 5174 B 5149	Birkenhead to Bromborough	Single	30 ft.	—	12 ft. 12.5 ft. min.	60 ft. 55 ft. min.	,, ,, ,,
13	Loop	Loop Road No. 1	A 5029 B 5148	Dock Tunnel Entrance and Green Lane via Watson and Exmouth Streets and Whetstone Lane	Single	30 ft.	—	15 ft. 12.5 ft. min.	60 ft. 55 ft. min.	,, ,, ,,
14	Service	Loop Road No. 2	A 5027	Duke St. via Park, Slatey and North Roads and Union Street	Single	30 ft.	—	15 ft. 12.5 ft. min.	60 ft. 55 ft. min.	,, ,, ,,
15	Roads	Loop Road No. 3	A 5088	Wallasey Bridge Road, Shrewsbury Road, Prenton Road, St. Paul's Road	Single	30 ft.	—	15 ft. 12.5 ft. min.	60 ft. 55 ft. min.	,, ,, ,,
15A		,,	A 553 B 5151 B 5172	Hoylake Road, Bidston Road, Bedford Drive and Bedford Road	Single	30 ft.	—	15 ft.	60 ft.	,, ,, ,,

year ending 31st March, 1938.

... ...	3,342,239
... ...	3,930,601
... ...	1,902,627
... ...	297,452
... ...	34,006
... ...	2,569,044
... ...	61,802
... ...	10,642
... ...	35,956

and Liverpool about 10 per cent.
le traffic.
arts of Wirral.
tained by local firms, Rutherfords,
ut 44,750 annually. This represents
sides of the river. The remainder
nployment.

lway Traffic, between Chester and

between docks on Birkenhead side
r cent. is motor traffic between the
Ellesmere Port and North Country,

Liverpool.

APPENDIX No. 9 (Section 5)

MAIN ROADS

(See Map No. 45 page 45)

Road No.	Proposed Classification	Name of Road	Existing Classification if any	Location and Connections	Carriageway	Carriageway	Centre Reservation	Side Reservation	Total width of Road	Tree Planting	Remarks
1	2	3	4	5	6	7	8	9	10	11	12
1		New Chester Road	A 41	Birkenhead East Tunnel Place, New Ferry to Chester and Midland	Dual	30 ft. each	10 ft. 5 ft. min.	15 ft. each 12.5 ft. min.	100 ft. 90 ft. min.	Tree lined on both sides and shrubs in centre reservation	

APPENDIX No. 10

FERRY SERVICES

Statistics for the passenger and goods services for the year ending 31st March, 1938.

Passenger Service		
'A'	Ordinary Passengers	3,342,239
'B'	Bus and Boat Returns	3,930,601
'C'	Workmen's Singles and Returns	1,902,627
'D'	Children	297,452
'E'	Night Boats	34,006
'F'	Contractors	2,569,044
Goods Service		
'G'	Vehicles and Attendants	61,802
'H'	Livestock (Animals)	10,642
'I'	Passengers	35,956

With reference to the above figures:—

'A'	Inter-communication traffic between Birkenhead and Liverpool about 10 per cent. being through railway traffic and 20 per cent. cycle traffic.
'B'	About 70 per cent. is week-end traffic to different parts of Wirral.
'C'	50 per cent. of this traffic is by pre-paid tickets obtained by local firms, Rutherfords, Cammell Lairds, and Admiralty, Lairds taking about 44,750 annually. This represents movement between works and steamers on both sides of the river. The remainder represents workmen's journeys to and from their employment.
'E'	About 90 per cent. is pleasure traffic for dances, etc.
'F'	Of this figure about 5 per cent. comes from Railway Traffic, between Chester and Birkenhead, the remainder is local.
'G'	About 40 per cent. is horse drawn traffic travelling between docks on Birkenhead side to docks on Liverpool side and vice versa; 30 per cent. is motor traffic between the same areas, 15 per cent. petrol transport between Ellesmere Port and North Country, the remainder being private motor car traffic.
'H'	Cattle transported from Woodside and Wallasey to Liverpool.
'I'	Week-end cycles traffic.

APPENDIX No. 11

RAILWAYS

Five separate companies (Cheshire Lines, Great Western, London & North Eastern, London Midland & Scottish, and Mersey Railway) operate the passenger and goods rail traffic in the borough, with facilities as follows :

Main line passenger stations	5
Electric Railway ditto	7
Goods stations and depots	11
Other groups of sidings	5

The area occupied by the railways is approximately 304 acres or 3.83 per cent. of the total land area of the borough.

Stations, Depots and Sidings.

1. Main Line Passenger Stations.	Woodside, Town (recently closed), Rock Ferry, Upton and Bidston.
2. Electric Railway Passenger Stations.	Hamilton Square, Central, Green Lane, Rock Ferry, Birkenhead Park, Birkenhead North and Bidston.
3. Goods Depots.	East and West Float, Shore Road, Canning Street, Cathcart Street, Hinderton Road, Morpeth Dock, Taylor Street, Dock Road, Egerton Dock, Birkenhead North and Town.
4. Groups of Sidings.	Cavendish, Bidston, Duke Street, Manchester and South Reserve.

The following tonnage of Birkenhead Goods traffic (excluding minerals) was dealt with through the Rail Depots before and during the war :

	1936	1941
C.L.C. ...	78,416	137,503
G.W.R. ...	139,673	281,740
L.N.E. ...	53,951	149,286
L.M.S. ...	291,623	506,880
Total ...	563,663	1,075,409

These figures do not include (*a*) the heavy Liverpool traffic dealt with by the Great Western Railway through the Morpeth Dock Station, and (*b*) approximately one million tons of minerals and coal dealt with by rail through Birkenhead in 1941. It is therefore obvious that the pre-war goods traffic capacity was not used to anything like its full extent.

APPENDIX No. 12

CENTRAL (CONWAY) NEIGHBOURHOOD UNIT

Area approximately 117 acres

Existing

1. *Housing*

Approximately 3,800 dwellings.

Gross density 32 dwellings per acre.

With the exception of the houses in Park Road East, and two modern blocks of flats, most of the existing dwellings are outworn and dilapidated, and therefore ripe for re-development, or destroyed by enemy action.

Taking the standard of 4.03 persons per dwelling, the estimated pre-war population was about 15,300.

2. *Schools*

Six existing schools (3 Council, 1 Roman Catholic, 1 C. of E., 1 Special) cater for approximately 3,500 scholars. One other school has been destroyed.

Two large mixed schools in Conway Street are semi-modern and in good repair and cater for 1,830 scholars.

3. *Churches and Other Religious Buildings*

2 Anglican (both in very good condition) 1 Roman Catholic (good), 2 Welsh (one very good, one bad) and 5 Non-conformist (two good, three poor).

Also a Convent and Home for the Aged, both in good condition.

4. *Public Houses*

Fifteen existing, mainly on corner sites in Conway Street. There is one Public House for every 1,020 persons or to every 253 dwellings.

5. *Communal Dwellings*

1 Cinema (modern and very good), 4 Clubs, 3 Halls, 1 Hotel (good but much deteriorated).

6. *Shops*

These are mainly concentrated in Exmouth Street, Conway Street, and part of Watson Street.

7. *Industry*

There is no heavy industry in this area. There is a little light industry off Claughton Road.

Proposed

1. *Housing*

Existing houses in Park Road East	44	(4.03 persons)	for	177 persons
Existing flats (4-storey blocks)	132	(„)	„	532 persons
Proposed flats („)...	200	(„)	„	806 persons
Proposed dwellings over shops	100	(„)	„	403 „
Proposed 2-storey maisonettes	960	(„)	„	3,869 „
„ maisonettes flats	960	(2 persons)	„	1,920 „
„ 3-storey large houses	110	(9 „)	„	990 „
Total	2,506 dwellings		for	8,697 persons

Proposed gross density ... 21.4 dwellings (74 persons) per acre.
Proposed net density ... 28.8 „ (100 „) „ „
Estimated overspill—approximately 6,600.

Actual ground covered by houses and flats (with gardens, etc.) about 87 acres or approximately 75 per cent. of the whole site.

The majority of new dwellings are planned in a north-south direction to secure east-west sunlight, and most maisonettes face an open " village green."

2. *Schools*

The future number of scholars will probably be 25 per cent. to 33⅓ per cent. of the future population, *i.e.* 2,200 to 2,900. Two retained schools in Conway Street provide for 1,830 leaving balance of 370 to 1,070, say 750 children, for whom new accommodation should be provided.

One large (Craven Street) and two small (facing Price Street) schools will provide for approximately 450, 150 and 150 respectively, and as an interim measure, part of the Roman Catholic School is retained pending the construction of new schools. Ultimately, this school, built in 1865 and not up to modern standards, will be cleared and the ground added to the open space around the church.

3. *Churches and Religious Buildings*

(*a*)	St. Peter's, Cathcart Street	Anglican
(*b*)	St. Matthew's, Park Road East	Anglican
(*c*)	St. Laurence's, Beckwith Street	Roman Catholic
(*d*)	Welsh Church, Parkfield Avenue	Welsh Presbyterian
(*e*)	St. Andrew's, Conway Street	Presbyterian
(*f*)	Emmanuel Church, Claughton Road ...	Independent

The general condition and state of repair of these buildings is very good, and the total seating capacity is approximately 3,800 places, less than half of which is normally used at present.

There are four small non-conformist places of worship which are in a poor state of repair, two are closed, and it is proposed that these shall be demolished.

One commanding site for a new church is allocated at the east end of Beckwith Street; it is estimated that the seating capacity will be about 500.

The total future seating capacity of churches will total 4,300 places (*i.e.*, approximately the same as existing) or 49 per cent. of the ultimate population. It is proposed that the existing Convent (off Claughton Road), and Home for the Aged (Parkfield Avenue) shall remain.

4. *Public Houses*

The following positions have been provisionally allocated for 14 Public Houses :—

In central shopping area along Conway Street	9
In ground floor of flats off Claughton Road	2
In ground floor of maisonettes in Conway Street	1
In maisonettes off Price Street	2

In addition it is proposed that the recently built Conway Arms at the junction of Claughton Road and Conway Street should remain for its natural life (after which the site will be added to the theatre centre). This attractive public house, although strictly beyond the boundary of the neighbourhood unit, will undoubtedly serve a proportion of the residents.

5. *Communal Buildings*

The new Gaumont Cinema in Park Road East, although awkwardly sited for planning purposes, should undoubtedly remain.

In addition the following new buildings are proposed :—

Cinema, Library, Dance and Assembly Hall, Community Centre, all grouped round the centre of the neighbourhood unit.

The existing Queen's Hotel is architecturally good but in a poor condition, and provision is made for rebuilding. A second hotel is sited on the opposite corner, also overlooking the very fine entrance to Birkenhead Park.

Four clubs, each capable of containing a small Assembly Hall, Gymnasium, and Craft Rooms are evenly distributed in the four quarters of the unit. Each club is situated near a church, from which source most successful youth leaders are recruited. One central Maternity Clinic, with six emergency beds is near the centre (off Conway Street), and small dental and skin clinics are provided in the other three sections, each set in a communal green. A public Swimming and Washing Baths, with open-air swimming bath and children's paddling pool, are sited at the end of the largest communal green. During the day the swimming baths would be available for the large new school at the end of the green, and the paddling pool for the adjoining Nursery School. Surplus heat from the baths would also be available to supply the adjoining Clinic and Nursery School, and the incorporated Communal Laundry.

Four Nursery Schools are evenly distributed over the neighbourhood unit, each with direct access to green open spaces in which children can safely play.

Five experimental Communal Laundries and Drying Rooms are included, mostly in positions where surplus heat can be used for, or provided from, other communal premises.

Three public conveniences (for both sexes) are placed in central positions where people would congregate for shopping, amusement, buses, etc.; these should preferably be underground.

6. *Shops*

Although the town shopping centre adjoins the neighbourhood unit, many local shops would be required for a community of nearly 10,000 persons, and sites for about 100 shops are grouped in the centre along Conway Street, with ample pedestrian and traffic circulating space, and service roads behind. Well and uniformly designed, this centre should be an admirable hub round which the life of the community would revolve.

7. *Industry*

The existing main Electricity Generating Station (recently extended) off Gordon Street must remain. Light industry and workshops may be permitted, to a limited extent, but all heavy industry must be prohibited. A substantial Industrial Area is scheduled in the north side of the new Price Street arterial road. Easy access from home to work is thus assured for the majority of the working population in the future.

8. *Traffic*

The new Argyle Street By-pass and Price Street arterial roads will eliminate the heavy traffic which at present percolates through this area. Buses will be confined to the main 60 ft. roads, and prohibited from the lighter residential roads. Bus stops and lay-byes are provided in the shopping centre and the junction of Claughton Road and Exmouth Street. The latter is designed to act as a bus terminus without interrupting traffic flow. Extensive provision is made for car parking and garages as indicated in the plan.

9. *Open Spaces*

Birkenhead Park (126 acres) which has cricket grounds, tennis courts, bowling and putting greens, etc., serves the whole of north Birkenhead, but except for one small existing recreation ground (.6 acre) there is a total absence of public open space in the neighbourhood unit with a consequent lack of sunlight, fresh air, play space and amenity generally. By means of a green girdle and communal greens, 16.6 acres (14.2 per cent. of the whole area), have been reserved for public open space, *i.e.* 1.8 acres per 1,000 persons. This provision is 27 times as much as exists, and is considered reasonable, having regard to the proximity of Birkenhead Park, the accessibility of the Wirral countryside and the central position of the neighbourhood unit.

APPENDIX No. 13
SOCIAL SERVICE ACREAGES IN NEIGHBOURHOOD UNITS

No.	Zone	Unit	Garages and Car Parks	Service Industry, Workshops, etc.	Community Buildings, Theatres, Hotels, Churches, etc.	Public Buildings	Shops and Offices, etc.	Schools	Total Social Service Acreage
1	Central	Conway	1	1	2.5	0.5	2.5	6.5	14
2	,,	Park	2	2	2	1	2	7	16
3	Inner	St. James's	3	4	4	2	5	20	38
4	Surburban	Claughton	3	4	4	2	4	24	41
5	Inner	Grange	2	2	2	2	3	15	26
6	Central	Mersey Park	5	5	5	2.5	5	17.5	40
7	Surburban	Oxton	2	2	2.5	2	3.5	14	26
8	,,	Holm Park	1.5	2	2	1.5	2	11	20
9	Inner	Victoria Park	3	4	4	2	5	18	36
10	,,	Rock Park	1	1	1	1	1	7	12
11	,,	Egerton Park	3	4	4	2	5	24	42
12	,,	Devonshire	1.5	2	2	1.5	2	15	24
13	Open and Surburban	Prenton	3	4	5	2	5	24	43
14	Open	Bidston and Oxton Park	2	2	2	1.5	1.5	16	25
15	Surburban	Noctorum	1	2	2	1	2	10	18
16	Open	Bidston Village	0.5	0.5	1	0.5	1.5	6	10
17	Surburban	Upton	4	4	5	4	7	30	54
18	,,	Saughall	1	2	2	1	2	8	16
19	,,	Woodchurch	4	4	5	3	5	40	61
20	Open	Thingwall	1	2	2	1	2	10	8

APPENDIX No. 14

TABLE SHOWING EXISTING AND PROPOSED HOUSING DENSITIES AND DISTRIBUTION OF POPULATION

Neighbourhood Unit				Existing (1939)		Proposed (ultimate realisation by 1986)									
No.	Density Zone	Name	Location	No. dwellings est. from Ordnance Map	Est. population @ 4.03 per house	Residential acreage	Social service acreage	Local open space acreage	Total area	Gross density per acre	Nett density per acre	Total population	Over-spill	Intake	Remarks
1	2	3	4	5*	6	7	8†	9‡	10	11	12	13	14	15	16
1	Central	Conway	Between Birkenhead Park and Woodside	3,800	15,315	87	14	16	117	74	100	8,700	6,615	—	Including some flats and a limited number of houses.
2	,,	Park	North of Birkenhead Park	2,100	8,464	65	16	7	88	70	95	6,175	2,289	—	75% in three storey maisonettes.
3	Inner	St. James's	Between Bidston Hill and Birkenhead Park	3,950	15,920	174	38	50	262	46	68	11,832	4,088	—	
4	Suburban	Claughton	From Bidston Road to Slatey Road	1,350	5,442	254	41	40	335	24	32	8,128	—	2,686	
5	Inner	Grange	West of Borough Road to Slatey Road	1,700	6,852	66	26	20	112	38	64	4,224	2,628	—	
6	Central	Mersey Park	South of Shopping Centre to Mersey Park	3,700	14,912	180	40	45	265	52	76	13,680	1,232	—	20% in maisonettes.
7	Suburban	Oxton	From Talbot Road to Singleton Avenue	750	3,024	144	26	30	200	23	32	4,608	—	1,584	
8	,,	Holm Park	North of Woodchurch Road and east of Railway	230	928	112	20	30	162	28	40	4,480	—	3,552	
9	Inner	Victoria Park	Surrounding Victoria Park	4,500	18,136	173	36	40	249	44	64	11,072	7,064	—	
10	,,	Rock Park	Extreme S.E. corner of the borough	450	1,815	49	12	6	67	41	56	2,744	—	929	
11	,,	Egerton Park	Borough Road to New Chester Road on boundary	2,300	9,270	156	42	40	238	33	50	7,800	1,470	—	
12	,,	Devonshire	West of Borough Road and on boundary	900	3,628	68	24	30	122	28	50	3,400	228	—	
13	Open and Suburban	Prenton	North of Prenton Golf Course and east of	1,450	5,845	60 229	5 [illegible]	4 [illegible]	69 297	21 31	24 40	1,440 [illegible]	—	4,755	

			and on boundary											
13	Open and Suburban	Prenton	North of Prenton Golf Course and east of Railway	1,450	5,845	60 229	5 38	4 30	69 297	21 31	24 40	1,440 9,160	—	4,755
14	Open	Bidston and Oxton Park	Adjoining Bidston Hill and Wirral Golf Course	180	727	250	25	25	300	17	20	5,000	—	4,273
15	Suburban	Noctorum	South of Upton Road and east of Railway	190	767	105	18	15	138	27	36	3,780	—	3,013
16	Open	Bidston Village	North west of Bidston Hill	80	324	56	10	14	80	20	28	1,568	—	1,244
17	Suburban	Upton	West of Railway and surrounding existing village	750	3,024	276	54	50	380	23	32	8,832	—	5,808
18	Suburban	Saughall	Extreme west unit west of Upton	300	1,210	94	16	15	125	30	40	3,760	—	2,550
19	”	Woodchurch	Between Arrowe Park, Upton and Railway	140	566	293	61	50	404	29	40	11,720	—	11,154
20	Open	Thingwall	Boundary unit to extreme south-west	170	687	108	18	16	142	24	32	3,456	—	2,769
Totals for the proposed residential area				28,990	116,856	2,999	580	573	4,152	33	45	135,559	25,614	44,317
New Industrial Areas; Civic, Commercial, Shopping and Academic Centres, etc.				6,460	26,035	—	—	—	—	—	—	4,350‖	21,685	—
Total dwellings and population				35,450	142,891§	—	—	—	—	—	—	139,909	47,299	44,317

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*Allowances have been made in this column for the approximate distribution of flats (dwellings in more than one occupation) and dwellings destroyed or damaged beyond repair by enemy action.

†Social services include schools, shops, car parks and garages, public and community buildings and small workshops.

‡Local open spaces are those which will occur as detailed plans of the units are made and NOT borough open spaces which are listed in the Schedule of Parks and Open Spaces.

§This figure approximates to the estimate of the Medical Officer of Health for the year 1939, but for the purpose of calculating overspill the figure of 150,000 has been adopted (as in the Merseyside Regional Plan).

‖Constituted as follows:—Shopping Centre 3,000; Civic and Commercial Centre 1,150; Academic Area 200.

APPENDIX No. 14

TABLE SHOWING EXISTING AND PROPOSED HOUSING DENSITIES AND DISTRIBUTION OF POPULATION

Neighbourhood Unit				Existing (1939)		Proposed (ultimate realisation by 1986)								
				No.	Est. pop-	Resi-	Social	Local		Gross	Nett	Total		

APPENDIX No. 15

OVERCROWDING 1936†

Giving for County Boroughs in England and Wales the Distribution of Overcrowded

Name of District	Items	Number of Families containing the equivalent number of Persons at the head of the column or number of dwellings with the permitted number at the head of the Column.												
		Up to 1	1½ & 2	2½ & 3	3½ & 4	4½ & 5	5½ & 6	6½ & 7	7½ & 8	8½ & 9	9½ & 10	10½ & 11	11½ & 12	12½ and over
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
All County Boroughs	Families :— Total	237,936	759,152	902,374	560,950	312,805	158,093	75,216	33,580	13,290	4,549	1,493	559	192
	Overcrowded	486	2,108	12,379	23,655	15,286	27,750	20,629	13,721	7,026	2,793	934	308	105
	Dwellings :— Total	2,832	110,983	250,456	264,727	311,017	511,435	84,269	884,303	41,425	410,676	54,625	91,197	42,243
	Overcrowded	1,780	15,777	38,256	6,422	37,846	11,044	8,559	5,498	1,536	375	68	25	12
Birkenhead	Families :— Total	1,013	5,643	8,457	6,896	4,795	2,950	1,708	946	478	242	143	68	82
	Overcrowded	—	6	49	176	251	464	403	273	197	81	47	28	39
	Dwellings :— Total	8	206	928	60	5,839	196	4,528	13,154	127	2,601	2,920	120	2,734
	Overcrowded	6	70	328	22	934	131	272	161	25	42	16	1	6
Liverpool	Families :— Total	19,488	32,561	39,691	26,769	16,921	10,211	5,637	2,588	1,023	363	113	34	—
	Overcrowded	107	341	2,152	2,279	1,149	2,056	1,543	1,073	560	220	55	19	—
	Dwellings :— Total	514	17,415	16,991	16,991	10,741	36,832	4,166	40,100	1,401	5,697	2,731	690	—
	Overcrowded	317	2,898	203	203	3,081	513	804	406	132	13	3	1	—
Bootle	Families :— Total	1,376	3,736	4,893	3,561	2,530	1,554	815	396	173	54	19	4	1
	Overcrowded	28	28	146	177	91	174	152	114	75	25	10	—	—
	Dwellings :— Total	75	1,016	1,861	1,391	1,071	3,374	253	6,764	175	1,538	726	46	822
	Overcrowded	45	174	249	42	266	112	45	57	27	3	—	—	—

Overcrowded means a greater number of occupants per dwelling than is permitted by the Housing Act, 1936 according to the following maxima
(*c*) Three rooms . . . 5 persons; (*d*) Four rooms . . . 7½ persons; (*e*) Five rooms . . . 10 persons, and an additional 2 persons per room in
A person under ten years old is counted as half a person
†Taken from the Ministry of Health Survey, 1936.

owded Families and Overcrowded Dwellings.

	Dwellings Inspected							
	All Dwellings				Dwellings owned by Housing Authorities			
½ and over	Total	Over crowded	Percentage over crowded	No. of families housed at minimum standard	Total	Over crowded	Percentage over crowded	No. of families housed at minimum standard
15	16	17	18	19	20	21	22	23
192	3,060,189	127,198	4.2	106,840	350.199	18,699	5.3	12,037
105								
42,243								
12								
82	33,421	2,014	6.0	840	3,544	612	17.6	250
39								
2,734								
6								
—	155,399	11,554	7.4	12,388	21,025	2,183	10.4	1,194
—								
—								
—								
1	19,112	1,020	5.3	681	2,509	156	6.2	75
—								
822								
—								

maxima :—Where a house consists of (*a*) One room . . . 2 persons ; (*b*) Two rooms . . . 3 persons ;
room in excess of five.

Name of District	Items	U
1	2	
All County Boroughs	Families :— Total Overcrowded	23
	Dwellings :— Total Overcrowded	
Birkenhead	Families :— Total Overcrowded	1
	Dwellings :— Total Overcrowded	
Liverpool	Families :— Total Overcrowded	1
	Dwellings :— Total Overcrowded	
Bootle	Families :— Total Overcrowded	1
	Dwellings :— Total Overcrowded	

Overcrowded means a

(*c*) Three rooms . . .

A person under ten ye

†Taken from the Min

APPENDIX No. 16 (Section 7)

Population: Births, Deaths and Migration

Year	Population	Total Change	Births	Deaths	Natural Increase	Migration	% Total Change	Annual % Natural Increase	% Migration
1	2	3	4	5	6	7	8	9	10
1921	149,994								
		—1694			11,913	—13607	—.11	.79	.90
1931	148,300								
		—600	2615	1711	+904	—1504	—.40	.60	1.00
1932	147,700								
		+2200	2453	2035	+415	+1782	1.41	.22	1.19
1933	149,920								
		+180	2530	1807	+723	+543	.12	.41	—.29
1934	150,100								
		—700	2594	1866	+683	—1383	—.47	.45	—.92
1935	149,400								
		—1400	2425	1861	+564	—1964	—.94	.4	—.98
1936	148,000								
		—2500	2379	1889	+490	—2990	1.68	.33	—2.01
1937	145,500								
		—1100	2468	1748	+716	—11716	—.76	—49	—1.25
1938	144,400								
		—1000	2405	1804	+359	—7959	.69	.25	—.94
1939	143,400								
		—7600	2502	2146	+356	—7956	5.32	.25	—5.57
1940	135,800								

APPENDIX No. 17

SCHEDULE OF PARKS AND OPEN SPACES

Ref. No.	Name and Location	Existing or New	Type	Area Acres	Remarks
1.	Arrowe Park	Existing	Public Park and Playing Fields	425	It is assumed that the whole of the Park will shortly be opened to the public.
2.	Birkenhead Park ..	„	„ „	126	Existing houses in the park should not be rebuilt.
3.	Victoria Park	„	„ „	29	
4.	Mersey Park	„	„ „	21	
5.	Bidston Hill	Both	Public Open Space	141.6	Includes 5.6 acres extension.
6.	Arno Hill, Storeton Road	Existing	Recreation Ground	7	
7.	Walker Park, Prenton ..	„	Public Park	11	
8.	Hamilton Square	„	Public Open Space	4	
9.	Upton-Fender Valley Strip	New	„ „	43.8	
10.	Woodchurch „ ..	New	„ „	123.6	Also for Public and School Playing Fields.
11.	Overchurch Hill. Upton ..	„	„ „	27.4	
12.	Noctorum to Upton Road Strip	„	„ „	23.0	
13.	Woodchurch Road to Prenton Strip	„	„ „	22.0	
14.	Woodchurch Road Brickfield and Claypit ..	„	Public Recreation Ground	23.8	
15.	Grangefield Park Woodchurch Road ..	New	„ „ „	14.8	
16.	Institution Park between Church and Derby Roads	New	„ „ „	17.8	
17.	Mount Wood, Storeton Road	New	„ „ „	5.8	
18.	Lever Wood (by Birkenhead Pumping Station ..	New	Public Open Space	4.2	
19.	Egerton Park	New	Public Recreation Ground	10.2	
20.	Main Railway Amenity Strips	New	Public Open Space	16.2	
21.	Mersey Riverside Front ..	New	„ „	32.6	
22.	Holt Hill Recreation Ground	New	Public Recreation Gardens	4.0	
23.	Upton Cricket Ground	Existing	Private Playing Fields	4.6	
24.	Upton Cricket Ground Extension	New	„ „ „	3.0	

APPENDIX No. 17—*(Contd.)*

Ref. No.	Name and Location	Existing or New	Type	Area Acres	Remarks
25.	Upton Recreation Ground (behind Convent)	Existing	Public Recreation Ground	4.2	
26.	Upton Hockey Pitch (behind Convent)	Existing	Private Playing Field	1.6	
27.	Upton Recreation Ground Rake Lane	Existing	Public Recreation Ground	4·4	
28.	Gautby Road Playing Fields	Existing	School Playing Fields	6.8	Also for public use out of school hours.
29.	Birkenhead Schools Playing Fields	Existing	School Playing Fields	18.6	
30.	” ”	New	” ” ”	37·0	Includes provision for displaced St. Anselm's Park High School fields.
31.	Boy Scouts' Association Playing Fields	Existing	Private Playing Fields	11.0	
32.	Oxton Cricket Ground	Existing	” ” ”	8.2	
33.	Holt's Recreation Ground	Existing	” ” ”	18.6	Decreased by Housing 11.2 acres.
34.	Birkenhead Park Rugby Ground	Existing	” ” ”	7·4	
35.	Park Road Secondary School Playing Fields	Existing	School Playing Fields	4·4	
36.	Tranmere Rovers Football Ground	Existing	Private Playing Fields	3.2	
37.	Shaftesbury Recreation Ground	Existing	Public Recreation Ground	6.2	
38.	Tranmere Sports Ground	Existing	Private Playing Field	6.8	
39.	Birkenhead Institute Playing Field	Existing	School Playing Fields	7.6	
40.	Rock Ferry School Playing Field	Existing	” ” ”	20.6	
41.	Conway Playing Field	Existing	Private Playing Field	11.8	
42.	Rock Park Cricket Ground	New	Public Open Space	5·4	
43.	St. Peter's Recreation Ground	Existing	Public Recreation Ground	4·4	
44.	St. James' Children's Recreation Ground	Existing	” ” ”	5·4	
45.	Bedford Drive Playing Field (New School)	Existing	School Playing Field	8.2	
46.	Wirral Ladies' Golf Course	Existing	Private Playing Fields	65.2	
47.	Prenton Golf Course	Existing	” ” ”	138.8	

APPENDIX No. 17 *(Contd.)*

Ref. No.	Name and Location	Existing or New	Type	Area Acres	Remarks
48.	Allotments in St. James Neighbourhood Unit	Both	Allotments	15.2	
49.	Allotments in Claughton Neighbourhood Unit	Both	„	1.8	
50.	Allotments in Mersey Park Park Neighbourhood Unit	Both	„	4.8	
51.	Allotments in Oxton Neighbourhood Unit	Both	„	6.1	
52.	Allotments in Holm Park Neighbourhood Unit	Both	„	10.2	
53.	Allotments in Victoria Park Neighbourhood Unit	Both	„	1.4	
54.	Allotments in Rock Park Neighbourhood Unit	Both	„	1.2	
55.	Allotments in Egerton Park Neighbourhood Unit	Both	„	20.6	
56.	Allotments in Devonshire Neighbourhood Unit	Both	Allotments	14.2	
57.	Allotments in Prenton Neighbourhood Unit	„	„	4.6	
58.	Allotments in Upton Neighbourhood Unit	„	„	11.4	
59.	Allotments in Saughall Neighbourhood Unit	„	„	2.4	
60.	Landican Cemetery	Existing	Cemetery	35.4	
61.	„ extension	New	„	46.4	
62.	Flaybrick Cemetery	Existing	„	25.6	
63.	Upton Cemetery	Existing	„	.6	
64.	Thingwall Common	New	Public Open Space	11.8	
65.	Thingwall Quarry Gardens	„	Public Recreation Ground	2.4	
66.	Gautby Road Yacht Gardens	Existing	„ „ „	6.2	Including 4 acres water area.
67.	Institutions with at least 10 acres of open space attached	Both	Private Open Space	186.4	This excludes schools.
68.	Scattered Private Tennis Courts and Bowling Greens	Existing	Private Playing Fields	50.	This is only approximate.
69.	Allowance for extra Playing Fields attached to new and existing schools, in Academic Area, Woodchurch, etc.	Both	School Playing Fields	380.	Approximate.

SCHEDULE OF PARKS AND OPEN SPACES—*(Contd.)*

SUMMARY

Type	Existing ares	Proposed area	Total required by modern standards	% area of borough	Area per 1,000 persons	Remarks
School Playing Fields . .	84 (detached) 122 38 (attached)	142 (detached) 500 118 (attached) 240 (new schools)	450	6.31	3.33	Includes Academic area Woodchurch new schools etc.
Playing Fields and Recreation—						
(*a*) Public Playing Fields . .	204	204		2.57	1.36	All in Public Parks ⅓rd allowed
(*b*) Private Playing Fields . .	323 } 599	323 } 635	420	4.08	2.15	
(*c*) Public Recreation Grounds . .	32	108		1.36	0.70	—
Open Spaces other than Playing Fields—						
(*a*) Public Parks . .	408	408		5.15	2.70	⅓rd deducted as public Playing Fields
(*b*) Other Public Open Spaces . .	140 } 639	444 } 946	420	5.60	2.96	
(*c*) Allotments . .	91	94		1.18	0.63	—
Other types of Private Open Spaces—						
(*a*) Institutions with substantial open land attached . .	128	186	—	2.38	1.24	Institutions with more than 10 acres attached
(*b*) Agriculture and Pasture . .	approx. 2,500	approx. 1,000	—	12.61	6.66	—
(*c*) Cemeteries . .	61	108	—	1.36	0.70	—
All types				42.60	22.43	

Note :—The total area of the Borough is taken as 7,925 acres and the population as 150,000.

APPENDIX No. 18

THE CASE FOR AGRICULTURE IN THE BIRKENHEAD PLAN.

A Statement by A. de M. Chesterman, Esq., of the Ministry of Agriculture and Fisheries.

In view of the urgent demand for development the importance of retaining agriculture within the borough boundary is a proper question for enquiry. Included within the boundary is a stretch of excellent land from Upton to Landican with a number of useful farm units. This forms the northern end of a tongue of valuable and almost unbroken farming country connected to the centre of Wirral, and which has good claim for preservation as such. Residential encroachment from the east, largely consequent on expanding industry, and from the west, brought about by the development of watering places, now seriously threatens this narrowed area. This threat is not to be measured only by the acreage taken for development, but by the effects of urban influence and dislocation, upsetting farm management. Also, the fear of impending development automatically produces the effect of "farming to quit." Projected new roads ' fenced ' and otherwise may also have a serious effect on farms by severance, leaving unsatisfactory space on either side of such roads to reconstruct new economic units. If, therefore, agriculture is worth preserving at all in the neighbourhood, steps must be taken now.

The soil over the greater portion of the land from Upton to Landican is excellent for general husbandry. In the neighbourhood of Landican, for example, whereas the ' solid ' rock is Bunter sandstone, except in a few places this is deeply covered by an easily worked soil. As a result of glacial and other effects it contains enough ' body ' to bring it potentially into the highest food producing category. It is also admirable for maintaining and breeding the best stock, more particularly dairy cattle. It would be difficult to find land which can be more readily adapted to a wider range of first-quality production.

It is generally agreed in the planning world, that the most delightful and healthy perimeter to development, apart from surroundings of peculiar natural beauty, is the completely unurbanised farm. Where, with relation to Birkenhead, should a line be drawn for development to provide this asset. (Author's Note : The plans show this).

It is assumed for reasons appearing elsewhere in the Planning Survey, Birkenhead cannot possibly meet her requirements without eventually developing some hundreds of acres west of the Upton-Storeton Railway.

On closest consideration, the lines limiting urban development on the one hand, and those terminating the northern end of the tongue of good land of the centre of Wirral, meet in the most reasonable manner along the Woodchurch Road. It is unmistakably to the advantage of the urban dweller, to permanently preserve land south of this line for farming proper.

APPENDIX No. 19.

THE PLANTING AND CARE OF STREET TREES.

By W. M. Campbell, Esq., N.D. Hort., the Curator of the Botanic Gardens, Kew, Surrey.

In large towns and cities throughout Great Britain it has long been considered a great asset to local amenities for the streets and main highways to be planted with trees. No doubt the need for this planting arose with the comparison between the old highway with its leafy hedgerow and winding course, and the more convenient straight road of today, which, minus some form of planting, becomes uninteresting and drab. Despite the fact that planting in streets was carried out many years previously, it was not until the passing of the special act in 1890 that local authorities had power to do this. The difficulties that could arise are best instanced by the Lewes Corporation being convicted at Sussex Assizes in 1886 for causing a nuisance by the planting of trees on a public highway.

In the early days this work was carried out by the highways department, and, knowledge of arboriculture being at a premium, the results were not always satisfactory. All too often forest trees were planted with the result that in a very short period of time the trees had outgrown their allotted space and lopping was the only method which limited the growth. The trees generally used were the Plane, Horse-chestnut and Lime. All these are good trees in their proper place, and both the Plane and Lime have the great advantage of standing pruning and constant amputation far better than any other types of large trees. The Plane is one of the finest of deciduous trees, and in the north with heavier rainfall it assumes magnificent proportions if left unpruned. The same applies to the Chestnut and to a lesser degree the Lime, so that today these trees are only planted in roads where they can be afforded ample growing space. Given this, the common Horse-chestnut is still worth planting because of the beauty of both its leaf and flower. The double-flowered form is even better, in that no fruits are developed and the boys debarred from the pleasures of conker-hunting. In industrial areas the Lime is not a good tree, as all too often it commences in dry seasons to shed its leaves from late July onwards.

Today far more thought and time is devoted to the problem of street trees. Though the highway department still maintain responsibility for the expenditure incurred in the planting and maintenance of road-side trees, the work is usually carried out by the Parks Superintendent and his staff. A much greater variety of trees are planted today and after planting they are tended with greater care.

The position of the actual tree-planting is important. Some advocate planting within a distance of one to two feet from the kerb, a position which is quite good providing that motor passing traffic does not necessitate the pruning of the branches overhanging the road to a point directly vertical with the kerb. This practice carried out, particularly where buses and similar public vehicles are using the roads, results in an unbalanced tree with all its growth over the footpath and nothing over the road. Unsightly specimens arise, and the health of the trees is often impaired by the drastic pruning necessary to keep the road-side growth in check. The only safe alternative is to plant trees in the centre of a broad highway, or in the normal street designed today to place them in a position at the back of the footpath. In this latter position they are planted in a recess in the boundary fence, wall or hedge of the adjoining property. The individual trees can be spaced to allow of one tree being planted between each two houses, or should this distance be too great they can be placed one to each frontage. The pavement is thereby left clear to pedestrians and the trees become the apparent property of the people outside whose house they are planted. In this way the householder begins to take a much greater interest in the welfare of the trees, and woe betide the youngsters who interfere with their particular tree. On new estates I would not hesitate to plant in this way, as the resultant effect allows of the trees growing to maturity and furnishing flower, leaf and fruit and shade without any detriment to vehicular traffic.

In very broad thoroughfares leading into our cities the use of a dividing strip to ensure single-way traffic is very essential, and undoubtedly it will become more so as time goes on. The treatment of such an area will depend on its width. Narrow strips call for the planting of trees and shrubs which ensure that the public do not make bare tracks down the side. Wider areas can be grassed over and a single row or a double row of trees planted at proper intervals. It is essential that the correct type of tree be used and single planting is always best if the forest type of tree is to be adopted. On main motor-roads, a word of warning is necessary. When roads rise on approaching a bend, the centre strip is best planted up with low growing shrubs, as often the shadow cast from the stems of trees and their stakes in the headlights of cars will result in approaching traffic swerving to avoid what appear to be pedestrians crossing in front of them.

Preparations for tree planting are very important, and they are best made when new roads are in course of construction. It is essential that adequate soil be available for planting, and so the surface soil should be stored on one side at the time of road-making. All trees require good growing conditions in their youth, after which time they are naturally better able to look after themselves. Where there is no existing soil, or where it is very poor, holes some six feet in diameter should be taken out to a depth of at least two feet, which depth on heavy or very gravelly soils is best increased to two and a half feet. Many trees die because the roots, particularly in winter, are covered in water, and on very heavy waterlogged soil it will be necessary to drain to a depth of two to three feet. The best method is undoubtedly by pipe drainage, but often deeper holes with hardcore filling to a certain depth will overcome the difficulty.

All too often the type of tree selected for planting is suitable, but the actual trees purchased are unsatisfactory. The main essentials are to have trees with clean stems, well-trained branch system, and a really good root system. Obviously trees that have been transplanted from time to time in the nursery will move more readily, as in this case the root system is more fibrous, and consequently less susceptible to damage. Height of trees may be important in some cases, but it is well to remember that the larger the tree the greater the check, and the longer the interval before good strong growth is recommenced.

In windswept positions staking is doubly important, and too much care cannot be taken with this operation. Stakes can be of Oak, Larch or Ash, though it will usually be found in practice that a piece of 3in. by 3in. or 4in. by 2in. pitchpine, with tarred base and painted upper surface, will in the long run prove most economical.

A further expense in the form of wire tree-guard is also incurred in built-up areas. Prior to the war, the cost of these was in the region of four to five shillings each, and as they more or less guaranteed the life of the tree which had cost a great deal more to plant, the investment was a wise one. With well prepared soil, a really good rooted tree, a strong stake and an adequate guard, there should be very few failures in modern street tree planting.

It is also a matter for controversy as to the best distance to plant trees in highways, though it is generally laid down that for the smaller type of tree that is used today the best distance is 30 feet apart. In wider throughfares where moderate sized trees are to be planted, a distance of fifty to sixty feet is essential, and on the widest of boulevards a hundred feet apart is not too much for really fine specimens. The ideal is to give that distance which is requisite for the ultimate growth of the tree without having recourse to drastic pruning after a few years.

Before proceeding to the trees best suited for planting, particularly in the Mersey-side area, mention should be made of the excellent results that can be obtained on the widest of park ways or roads flanked with adequate open space, by the adoption of group planting. This is carried out informally, and a variety of both trees and shrubs can be introduced. The plantings are set out informally amidst grass which is kept close mown. In this way one can feature masses of the English Oak alongside the Turkey and the Scarlet Oak without any clashing. Undoubtedly this form of planting for town approaches is the most ideal.

It is obvious that trees for planting around the Birkenhead districts should have the advantage of hardiness, and the leaves should be strong enough to stand up to prevalent winds without detriment to their appearance. Of all the trees available, none will give greater satisfaction than varieties of Acer. The common Sycamore will grow in the worst of conditions, but the varieties such as 'Atropurpureum' and 'Albo-variegatum' should be planted for preference. The Norway Maple—Acer Platanoides—is an excellent tree, all too little grown, and here again added colour can be obtained by the introduction of the varieties 'Schwedleri' and 'Reitenbachii'. Others in this group are Acer Dasycarpum (Silver Maple) and Acer Rubrum (Red Maple).

Amongst smaller growing trees, the common Almond has become very popular and, though not particularly long-lived, it is a very attractive tree when in flower. The hybrid Almond and Peach, grown under the name of Prunus Pollardii, is even better, having larger flowers and the great advantage of stronger constitution.

Various forms of Crab-apples are also popular, though very often the fruits are an attraction to boys, and trees are often broken in the course of their collection. The colour of the flowers in this type of tree varies from the ordinary apple blossom to the deep crimson flowers of Malus Purpurea and M. Lemoinei. This latter tree I believe to be the finest coloured of them all, though hybrids such as M. Aldenhamensis, M. Eleyii, M. John Downie, M. Beauty of Montreal and Dartmouth are all good. One tree in this group should be planted extensively. It is the Bechtel Crab, Malus Ioensis Var Plena, whose large double pink flowers are produced long after the rest of the Malus are finished. The trees constitute a perfect picture, and the perfume from the flowers is carried over long distances. Fruits are never borne and so the trees are not likely to be damaged by boys.

Within the smaller growing type of tree come the various members of the Sorbus family, most commonly known of which is the Mountain Ash, Sorbus Aucuparia. This hardiest of trees is one of the most ornamental, having the advantage of clean attractive foliage and magnificent fruit. Another nearly as well known is the Whitebeam tree—Sorbus Aria, which again is attractive in fruit, and is always beautiful in summer with its greyish-green leaves. This tree likes chalk, and it is always advisable to add requirements of this kind if they are not already available. Other members of the Sorbus family worthy of planting are Sorbus Intermedia and S. Pinnatifida, especially in towns where atmospheric conditions are not good.

Japanese Cherries have become popular, and provided that adequate space is available for their growth and also that the upright growing varieties are selected, the trees can be highly recommended. It is well to remember that they do not like pruning, and when this has to be carried out on a drastic scale, die-back becomes pronounced. In roadside planting, it is advisable to mix varieties so that one colour combines with the other. The upright habit of 'Amanogawa' is ideal, whilst other varieties which appear to do well in the cooler conditions of the north are Fugenzo, Kwanzan, Shiro-fugen and Ukon.

The flowering Thorns have long been used for roadside planting, but there are many very attractive species and varieties of Crataegus which have been neglected. Amongst the most beautiful of the Thorns, both for their flower, fruit and autumnal colour, are Crataegus Carrierei, C.Prunifolia, C.Tanacetifolia, and C.Orientalis. Here again the plants have the advantage of hardiness, and yet can be regarded as one of the most attractive group of trees for this particular work.

There are of course many other trees which could be added, but the great difficulty for some years to come will be the acquisition of trees in sufficient numbers, as the grower has all too often concentrated on the most obvious choices to the exclusion of some of the better but lesser known varieties. Where ample space is available, one could not wish for finer trees than the Oak, Beech, and the Ash. Naturally circumstances will decide the type of tree to be planted, but where there is unlimited space, large growing trees, such as the Tulip tree (Liriodendron Tulipifera), the Indian Bean Tree (Catalpa Bignonioides) Tree of Heaven (Ailanthus Glandulosa), London Plane (Platanus Acerifolia) the Hornbeam (Carpinus Betulus) various forms of Elm, Oak, and possibly Lime will ensure fine specimen trees if allowed to develop.

In summing up, one can say that trees in the highway are a great asset, beautifying industrial areas, and forming an educational interest to the general public. It is necessary, however, that the work should be carried out with great care, so that not only are the best varieties of trees planted, but also that they are afforded growing conditions which will enable them to reach maturity without great hardship.

APPENDIX No. 20

EXISTING SCHOOLS AND PROPOSED USE

Based on information supplied by the Director of Education
(See Maps Nos. 20, 41, & 48, pages 83, back cover and 58.)

Ref. No.	Name	Location	Type	Accommodation			Opened	State of Repair	Proposals	Remarks
				Boys	Girls	Total				
1	Alpha Drive	Rock Ferry	Senior	400	400	800	1935	Good	To be retained	
2	Bidston C.E.	Bidston	Mixed & Infants	—	—	104	1838	Old building	To be disbanded	Site to be retained
3	Brassey St.	Laird Street	Senior	360	360	720	1911	Good	To be retained	
4	Christ Church C.E.	Borough Road	Mixed and infants	—	—	520	—	Now demolished	To be disbanded	Destroyed by enemy action
5	Conway Street	Conway Street	Senior	350	440	790	1903	Good	To be retained	
6	Holy Cross R. C.	Hoylake Road	Junior mixed and infants	—	—	450	1931	Good	,, ,,	Wooden building
7	Hemingford St.	Conway Street	Senior	520	520	1040	1909 Ext. 1930	Good	,, ,,	
8A	Holy Trinity C. E.	Eldon Street	Junior boys and girls	—	—	277	1897	Poor	To be disbanded	
8B	,, ,,	Brook Street	,, ,,			—	1872	Poor	,, ,,	No longer used as school
8C	,, ,,	Beckwith Street	—			—	1830	Poor	,, ,,	Damaged by enemy action
9	Temple Road	Birkenhead	Senior	480	480	960	1914 Ext. 1930	Good	To be retained	
10A	Our Lady's R. C.	Cavendish St.	Junior mixed	—	—	300	1912	Badly damaged	,, ,,	Partly demolished enemy action
10B	,, ,,	,, ,,	Senior	—	280	280	1912	,, ,,	,, ,,	
10C	,, ,,	,, ,,	Infants	—	—	350	1934	Good	,, ,,	
11	Tollemache Road	Upton Road	Senior	480	480	960	1933	,,	,, ,,	
12	Oxton C. E.	Storeton Road	Junior mixed and infants	—	—	326	1853	Poor	,, ,,	To be rebuilt
13	Bidston Avenue	Tollemache Road	Junior mixed and infants	—	—	95	921	Good	,, ,,	
14	St. Anne's C. E.	Near Park Station	Junior mixed and infants	—	—	300	1850	Poor	,, ,,	Part damaged by enemy action
15	Cathcart Street	Conway Street	,, ,,	—	—	700	1896	,,	To be disbanded	
16	St. Anne's R. C.	Highfield Road, Rock Ferry	Boys, girls, and infants	—	—	948	1878 1913	Infants ; poor B. & G. good	Part to be disbanded	Site to be retained
17	Cole Street	Claughton Road	Junior mixed and infants	—	—	646	1929	Good	To be retained	
18	St. Catherine's C. E.	The Holt, Higher	,, ,,	—	—	606	1861	Unstable	,, ,,	Unsafe in present

17	Cole Street	Claughton Road	Junior mixed and infants	—	—	646	1929	Good	To be retained	
18	St. Catherine's C. E.	The Holt, Higher Tranmere	,, ,,	—	—	696	1861	Unstable	,, ,,	Unsafe in present condition
19	Gautby Road	Hoylake Road	,, ,,	—	—	600	1930	Good	,, ,,	Wooden building
20	St. James C. E.	Laird Street	—	—	—	—	—	Demolished	Site to be retained	Damaged by enemy action
21	Laird Street	Laird Street	Infants	—	—	310	1904	Junior block demolished; remainder fair	To be retained	Damaged by enemy action
22	St. John's C. E.	Oliver Street	Junior boys and girls and infants	—	—	720	1845/9	Poor	To be disbanded	
23	Mersey Park	Higher Tranmere	Junior mixed and infants	—	—	895	1907	Good	To be retained	
24	St. Joseph's R. C.	Dingle Road	,, ,,	—	—	300	1902 1939	,,	,, ,,	
25	Overchurch	Moreton Road	Junior mixed and infants	—	—	200	1938	Good	To be retained	
26	St. Laurence's R. C.	Park Street	Senior girls, junior mixed and infants	—	460	1159	1865 1912	Poor, to be replaced	,, ,,	Senior girls to be transferred to new school in Academic Centre
27	Pilgrim Street	Chester Street	Junior mixed and infants	—	—	648	1922	Fair	Ultimately to be disbanded	Semi-permanent type of school
28	St. Luke's C. E.	Old Chester Road	Girls, junior boys and infants	—	265	852	1884	Poor	,, ,,	
29	Ionic Street	Rock Ferry	Junior mixed and and infants	—	—	910	1913	Good	To be retained	
30A	St. Werburgh's R. C.	Grange Road	Junior Boys	264	—	264	1850	Poor	To be disbanded	
30B	,, ,,	Austin Street	Girls and Infants	—	250	500	—	Poor	,, ,,	Demolished by enemy action
31	The Dell	Rock Ferry	Junior mixed and infants	—	—	740	1932	Good	To be retained	
32	Tranmere Higher Grade	The Holt	Mixed and infants	—	—	380	1868	Fair	,, ,,	
33	The Woodlands	Borough Road	Junior mixed and infants	—	—	800	1895	Fair	To be disbanded	
34	St. Joseph's R. C.	Upton	,, ,,	—	—	167	—	,,	To be retained	
35	Trinity Street	Park Street	,, ,,	—	—	700	1930	Good	,, ,,	
36	Woodchurch C. E.	Woodchurch	,, ,,	—	—	137	—	Fair	,, ,,	
37	Well Lane	Rock Ferry	,, ,,	—	—	900	1899	,,	,, ,,	
37A	Park Road	Well Lane	Infants	—	—	200	1906	Poor	To be disbanded; site retained	Temporary structure
38	St. Hugh's R. C.	Park Road South	Senior	600	—	600	1922 1934	Good	To be retained	
39	Woodchurch Road	Woodchurch	Junior mixed and infants	—	—	1090	1901	Good	,, ,,	
40	Birkenhead School	Shrewsbury Road	Secondary boys non-council	400	—	400	1860	Good	,, ,,	
41	Special School	Claughton Road	—	—	—	—	1903	Fair	To be replaced by new premises	
42	Birkenhead High School	Devonshire Place	Girls' secondary non-council	—	360	360	—	Good	To be retained	
43	Birkenhead Institute	Whetstone Lane	Council secondary	360	—	360	1889	Good	,, ,,	
44	St. Anselm's College	Egerton Road	Secondary non-council	300	—	300	—	Good	,, ,,	
45	Rock Ferry High School	Highfield South	Council school secondary	360	—	360	1925 1938	Good	,, ,,	
46	Holt Hill Convent	Holt Hill	Secondary non-council	—	300	300	—	Good	,, ,,	
47	Park High School	Park Road North	Council secondary school	360	—	360	1925	Good	,, ,,	
48	Upton Convent Girls'	Upton Hall, Upton	Non-council secondary	—	275	275	1863 1910	Good	,, ,,	
49	Girls' secondary, Park Road South	Park Road South	Council secondary school	—	500	500	1928	Good	,, ,,	
50	Birkenhead School of Art	Conway Street	Art school	—	—	—	—	Good	,, ,,	
51	Birkenhead Technical School	Tranmere	Technical College	—	—	—	—	—	To be disbanded	

APPENDIX No. 20

EXISTING SCHOOLS AND PROPOSED USE

Based on information supplied by the Director of Education
(See Maps Nos. 20, 41, & 48, pages 83, back cover and 58.)

APPENDIX No. 21

SUMMARY OF PRIMARY SCHOOLS TO EACH NEIGHBOURHOOD UNIT

(See Map No. 41 back cover)

Unit	Location	Nurseries	Infants	Junior	Existing Schools to be retained	Existing Schools to be disbanded
1	Conway	4	2	2	St. Laurence's (part of)	Cathcart Street (Conway Street) Holy Trinity (Beckwith Street) " " (Eldon Street)
2	Park	2	1	1	Brassey Street; Our Lady's, Cavendish Street; St. Anne's, Park Street; Trinity, St. Paul's Road	Nil
3	St. James's	4	2	2	Gautby Road Schools; Holy Cross; Laird Street Council School; Bidston Avenue; Tollemache Road	St. James's, Laird Street
4	Claughton	4	2	2	St. Anselm's; Birkenhead High School (Girls), Devonshire Place; Birkenhead School	Nil
5	Grange	2	1	1	St. Hugh's	Christ Church, Borough Road
6	Mersey Park	5	2	2	Birkenhead Institute; St. Joseph's, Dingle Road Holt Hill Girls' Convent; St. Catherine's, The Holt; Tranmere Higher Grade; Mersey Park School	St. Werburgh's, Austin Street The Woodlands School Technical College, Leighton Road St. Luke's, Old Chester Road
7	Oxton	2	1	1	Woodchurch Road School; Oxton C.E., Storeton Road	Nil
8	Holm Park	2	1	1	Nil	Nil
9	Victoria Park	4	2	2	Well Lane School	Park Road, Well Lane
10	Rock Park	1	1	1	Alpha Drive; The Dell	Nil
11	Egerton Park	3	2	2	St. Anne's, Highfield Road (High School for Girls'); Woodland Road; Rock Ferry Boys' High School	Nil
12	Devonshire	1	1	1	Temple Road School	Nil
13	Prenton	4	2	2	Nil	Nil
14	Bidston and Oxton Park	2	1	1	Nil	Nil
15	Noctorum	2	1	1	Nil	Nil
16	Bidston Village	1	1	1	Nil	**Bidston Church of England School**
17	Upton	4	2	2	Overchurch, Moreton Road; Convent, Upton Hall School; St. Joseph's, Upton	Nil
18	Saughall	2	1	1	Nil	Nil
19	Woodchurch					

18	Saughall	2	1	1	Nil	Nil
19	Woodchurch Estate	5	3	3	Woodchurch C. E. School	Nil
20	Thingwall	1	1	1	Nil	Nil

It is proposed that Secondary and High Schools shall be evenly distributed as required, and suggested locations are shown on Map No. 41.
The proposed Academic Centre has been described at length in Section 8.

APPENDIX No. 22

SCHOOLS

ated future requirements and ideal distribution for ultimate
ation of 150,000. (Based on the 1944 Education Act.)

	Pupils in each School	Building and Playground acreage	Playing Fields acreage	Acreage per School	Number of Schools	Total acreage
.. ..	40	¼	—	¼	60	15
.. ..	175	2	1	3	30	90
.. ..	280	2	3	5	30	150
.. ..	450	3	13	16	7	112
.. ..	450	3	13	16	7	112
.. ..	270	2	8	10	5	50
r) ..	360	2	11	13	2	26
r) ..	360	2	11	13	2	26
..	270	9	16	15	3	45
..				10	2	20

Unit of approximately 10,000 population to have :—
ls, say one in each quarter.
nt and Junior combined, one in
half.
eighbourhood Units :—
s' Modern
ls' „
ent sites closely related.
to be allocated in accordance with the prevailing conditions.

APPENDIX No. 21

SUMMARY OF PRIMARY SCHOOLS TO EACH NEIGHBOURHOOD UNIT

(See Map No. 41 back cover)

Unit	Location	Nurseries	Infants	Junior	Existing Schools to be retained	Existing Schools to be disbanded
1	Conway	4	2	2	St. Laurence's (part of)	Cathcart Street (Conway Street) Holy Trinity (Beckwith Street) " " (Eldon Street)
2	Park	2	1	1	Brassey Street; Our Lady's, Cavendish Street; St. Anne's, Park Street; Trinity, St. Paul's Road	Nil
3	St. James's	4	2	2	Gautby Road Schools; Holy Cross; Laird Street Council School; Bidston Avenue; Tollemache Road	St. James's, Laird Street
4	Claughton	4	2	2	St. Anselm's; Birkenhead High School (Girls), Devonshire Place; Birkenhead School	Nil
5	Grange	2	1	1	St. Hugh's	Christ Church, Borough Road
6	Mersey Park	5	2	2	Birkenhead Institute; St. Joseph's, Dingle Road Holt Hill Girls' Convent; St. Catherine's, The Holt; Tranmere Higher Grade; Mersey Park School	St. Werburgh's, Austin Street The Woodlands School Technical College, Leighton Road St. Luke's, Old Chester Road
7	Oxton	2	1	1	Woodchurch Road School; Oxton C.E., Storeton Road	Nil

APPENDIX No. 22

SCHOOLS

Estimated future requirements and ideal distribution for ultimate population of 150,000. (Based on the 1944 Education Act.)

Type of School	Pupils in each School	Building and Playground acreage	Playing Fields acreage	Acreage per School	Number of Schools	Total acreage
Nursery	40	¼	—	¼	60	15
Primary (Infant)	175	2	1	3	30	90
Primary (Junior)	280	2	3	5	30	150
Secondary (Boys)	450	3	13	16	7	112
Secondary (Girls)	450	3	13	16	7	112
Secondary (Technical)	270	2	8	10	5	50
Secondary (Boys' Grammar) . .	360	2	11	13	2	26
Secondary (Girls' Grammar) . .	360	2	11	13	2	26
Young People's College	270	9	16	15	3	45
Technical College				10	2	20

LOCATION

Each Neighbourhood Unit of approximately 10,000 population to have :—

1. 4 Nursery Schools, say one in each quarter.
2. 2 Infant } Infant and Junior combined, one in
3. 2 Junior } each half.

Between each pair of Neighbourhood Units :—

1. 1 Secondary Boys' Modern
2. 1 „ Girls' „

These can be on adjacent sites closely related.

Other units of schools to be allocated in accordance with the prevailing conditions.

APPENDIX No. 23

PUBLIC HEALTH ESTABLISHMENTS

(See Map No. 41 back cover)

The following proposals are made and should materialise mostly during the first ten-year plan of the Scheme :—

1. *Clinics.*
   - (*a*) *Ante-Natal and Child Welfare Clinics.* Five of these are required. Two good clinics already exist and are incorporated in the Scheme ; " The North Health Clinic " in Park Road West and " The South Health Clinic " in Bedford Avenue. The other three are allocated in the following areas :—one in the Central Area, Conway Neighbourhood Unit (see drawing No. 48 page 58), the second is proposed in Prenton and the third in the centre of Woodchurch.
   - (*b*) *Dental Clinics.* One is suggested in the Central Area and another in Woodchurch.
   - (*c*) *Skin Disease Clinic.* One is proposed in the Central Area ; (*b*) and (*c*) could be combined in the same Clinic which would, of course, effect economy and easy running.
   - (*d*) *V.D. Clinic.* This, for obvious reasons, is better if combined with the General Hospital.
2. 1,000 *bed General Hospital.* This is to be situated on the site of the present Mere Hall with its ideal position sloping south and south-west and overlooking delightful country. The site proposed is approximately 58 acres and includes the following :—
   - (*a*) General Hospital and Infirmary ;
   - (*b*) Maternity Hospital ;
   - (*c*) Children's Hospital ;
   - (*d*) Nursing Homes ;
   - (*e*) Convalescent Homes ;
   - (*f*) Occupational Therapy Centre ;
   - (*g*) Clinics ;
   - (*h*) Any other health establishment as required, including Nurses' Home.

The advantages of such a comprehensive hospital are obvious. Only with such a hospital will a borough the size of Birkenhead be able to make sure of the best medical advice and expert attention, as this hospital will supersede all the other existing general hospitals and, to a great extent, private establishments, and provide healthy establishments in the Borough. The proposed Baths on the south-east corner of this Hospital will also help in the work of the Hospital.

3. The existing Isolation Hospital in Tollemache Road and the Children's Hospital in Barnston, near Thingwall, have good amenities and conveniences and are therefore to be kept as part of the new Plan.
4. The rehabilitation Centre should be in the Central area on account of the desirability of easy access.

All the proposed additional health establishments should be commenced as soon as circumstances permit and certainly in the first ten-year Plan, while the 1,000 bed General Hospital should have early consideration in the second ten-year Plan.

APPENDIX No. 24

BATHS AND WASHHOUSES

General Notes

Public Baths in future should be used not only for the purpose of swimming, but also as part of the recreational centre included with the community centre of a neighbourhood unit. We particularly recommend that the future baths unit should provide amenities and services such as sun lounges, gymnasia and cafes. School children, especially, will use the baths more and more; this is a very important reason why standards of baths design, construction and cleanliness should everywhere be raised.

Great economies can be achieved with a building which combines the function of a baths establishment with that, say, of clinic. In addition to a saving in costs of administration, an architectural advance in planning and composition can be brought about. We make the following proposals, prepared in conjunction with the Corporation Baths Superintendent and Engineer, regarding the future position of baths in the Borough.

1. *Central Baths*

These to be in place of the existing baths in Livingstone Street, and to be regional as well as central for the Conway Neighbourhood Unit (see Map No. 75 page 65). They should contain covered baths for general public use, as well as for schools, and there should be an additional open-air pool of 100 x 33⅓ yards. The covered baths would include one of size, say, 75 x 36 feet for adults, youth clubs and senior scholars, and a smaller school instruction bath of 60 x 30 feet, from 3 to 6 feet in depth. At the time of the greatest congestion, when summer weather coincides with the swimming curriculum of the schools, the public could be directed to the open-air pool, leaving the indoor pools to be reserved for scholars. The larger indoor bath could be floored over in winter, and used by youth clubs for a gymnasium and for boxing displays.

2. *Argyle Street South Baths*

These to be the West Merseyside Medicinal Baths Centre. They should be approximately on their present site, and have an area of about half-an-acre. A school bath (size 60 x 30 feet with depth 3 to 6 feet) should be included to serve a number of schools in the area.

3. *Byrne Avenue Baths*

To be incorporated in the new scheme with possible improvements in the grounds. Here there is the possibility of a school instruction bath served from existing salt water mains.

4. *St. James' Neighbourhood Unit Area Baths*

Another establishment should be allotted in this area to cater for the local population, and should comprise communal laundry (including central towel laundry for Baths and Corporation Departments) and swimming instruction bath (60 x 30 feet) for schools and youth clubs.

5. *South Western Area Baths*

The open-air and closed baths should cater for the south-western area of Oxton, Claughton, etc., on a site within easy reach of St. Saviour's Church.

6. *Woodchurch Baths*

Woodchurch will cater for the whole area of Upton, Woodchurch, Thingwall and Arrowe. The unit should include a covered bath (75 x 35 feet) for adults, and a school instruction bath (60 x 30 feet) to serve schools in the area.

Washhouses

The establishment of washhouses in all the central areas, and in some cases of the intermediate, in accordance with local requirements, is also recommended. This will be particularly useful for existing working-class flats and tenements; it will eliminate washing-day discomfort and conditions injurious to health in the home.

The question of the provision of washhouses should have been tackled long ago. A washhouse should, indeed, have been planned as an integral part of each block of flats when these were designed. Birkenhead is unfortunately one of the few industrial areas where such provision has not been made.

Certain areas stand out as appropriate sites; examples of these are in the Dock Estate at the North End, the entire vicinity of the Livingstone Street Baths and the flats and adjacent properties in New Chester Road.

Generally speaking, washhouses give a higher percentage of revenue to expenditure than any other form of baths activity, and capital expenditure for suitable washhouses is not proportionately large.

APPENDIX No. 25

WATER SUPPLY

(Prepared in conjunction with Mr. E. G. Hutson, M.I.C.E., M.I.W.E.,
Water Engineer.)

The principal source of the Birkenhead Corporation Water Supply is the Alwen Reservoir near Cerrig-y-druidion, North Wales. The water is a soft moorland water from a high, upland gathering ground. It is chemically treated, filtered and chlorinated at the Reservoir before it is conveyed through an Aqueduct, 42½ miles in length, to Birkenhead.

The statutory area of supply is the County Borough of Birkenhead, excepting the Prenton and Upton Wards, which are within the area of supply of the West Cheshire Water Board. In addition, supplies in bulk are given to the County Borough of Wallasey and to numerous Authorities, industrial undertakings and private consumers in North Wales situated on or near the line of the aqueduct.

The Alwen water as delivered in bulk and to consumers in Birkenhead is a pure and wholesome water eminently suitable for domestic use and for trade and industrial purposes, soft and palatable but without any harmful action on lead or other metals.

In addition to the supply of soft water from North Wales, emergency supplies are also available from the Flaybrick and Springhill Pumping Stations in Birkenhead. These waters are exceptionally pure and wholesome but are harder than the Welsh water. The water from both wells is chlorinated.

The supply area in Birkenhead is divided into different zones, fed from service reservoirs at various levels so that throughout the town the pressures on taps and fittings are adequate but not excessive.

The Water Committee have under consideration a programme of developments and extensions designed to meet the ever increasing demands for pure water in ample quantities.

APPENDIX No. 26

DRAINAGE AND SEWERAGE

(Prepared in conjunction with Mr. C. E. Day, Chief Engineering Assistant, Borough Surveyor's Dept.)

For sewerage purposes Birkenhead is divided up into several well defined areas, viz :—

(*a*) West of the local ridge formed by Moreton Road, Upton, Upton Village, and west of Arrowe Park Road.

(*b*) East of the above and west of the Bidston, Oxton, and Prenton ridge, including Thingwall.

(*c*) East of the latter ridge and north of an irregular line roughly from the top of Rose Mount to Woodside.

(*d*) The remainder of the Borough, fronting the river and extending as far westwards as Storeton Road.

Area (*a*) drains to a sewer constructed by the former Wirral Rural District Council, known as the North Wirral Outfall Sewer. This discharges to sewage works near Dove Point, Meols, which are vested in the Wallasey Corporation, and the sewer is used by agreement by all other authorities within its drainage area. Treatment of the effluent is given at the sewage works and the treated sewage is then discharged into the Irish Sea.

Area (*b*) together with certain areas of Moreton, Wirral, and Bebington, is served by the Fender Valley Sewer which follows the Fender Stream, and discharges into the Great Culvert.

The Great Culvert commences at the west end of Beaufort Road and discharges into the river behind Woodside Goods Stage, passing en route under Beaufort Road, Corporation Road, and Shore Road on the Dock Board Estate. The Great Culvert is vested in the Mersey Docks and Harbour Board, the Corporation contributing to its maintenance.

All substantial new development in areas (*a*) and (*b*) is to be drained on the separate system. In the case of (*b*) this is in furtherance of a comprehensive scheme for the improvement of the existing facilities which are inadequate fully to serve the area.

Area (*c*) discharges into the Great Culvert at various points in its length, and is sewered on the combined system.

Area (*d*) discharges directly into the River Mersey through six main outfalls, situated at Woodside, two under Cammell Laird's yards, St. Paul's Road, Rock Park, and the Dell. The area is sewered on the combined system.

No treatment is given to the sewage from areas (*b*) (*c*) and (*d*).

In addition to the above, a small area of Dacre Hill is drained by agreement into the Bebington sewerage system in Old Chester Road, south east of King's Lane.

Certain areas of the Borough are occasionally subject to flooding due to heavy rainfall and particularly in the low lying areas when such rainfall coincides with the periods of tide-lock of the sewers.

Much of the low lying land in the Birket and Fender Valleys is also subject to flooding from surface water, due to the inability of the Great Culvert to discharge all the flows entering it, among which is the whole flow of the River Birket and its tributaries.

The Corporation however, has schemes in course of preparation to deal with the major instances of flooding throughout its area, and also joint schemes with the adjoining authorities to alleviate the surface flooding referred to above.

APPENDIX No 27

GAS SUPPLY

(Prepared in conjunction with Mr. J. Hood, M.B.E., A.M.I.M.E., M.I.G.E., Borough Gas Engineer.)

The Gas Works was built in 1840-41 on a small site now forming the portion of the Works to the right of the entrance gate. It continued on this site until 1859 when the owners, who also owned the Water Works, were bought out by the Birkenhead Improvement Commissioners.

The Gas and Water Departments were largely governed by the Gas Works Clauses Act of 1847 and later 1871 Act. The Birkenhead Corporation Act of 1881 divided the Water and Gas Undertakings both with regard to capital and outstanding debt of the two Undertakings. This 1881 Act gives the limits for the supply of gas in the Borough under the several townships of Lower Bebington, that part of Higher Bebington which is not within the borough, Bromborough, Great Neston, Little Neston, Poulton-cum-Spital, Thornton Hough, Upton, Bidston and Prenton, and in 1884 the parish of Noctorum was included.

The Department received an Order dated 1926, which gives Birkenhead the statutory right of supplying the additional areas :

Arrowe
Barnston
Brimstage
Gayton
Heswall-cum-Oldfield
Irby
Landican
Thingwall
Pensby
Raby
Storeton
Woodchurch
Thurstaston

and in the year 1931 the Gas Undertaking purchased the Neston and Parkgate Gas Company having since 1881 had statutory rights in that area. This makes the area of supply approximately 48 square miles.

The following are some statistics regarding the Undertaking :

Number of consumers, approximately 50,000.

Gas made in the financial year ended 31st March, 1945, 1,624 million cubic feet.

The industrial and central heating load amounts to 200 million cubic feet.

The total area of supply is 48 square miles, and the length of gas mains 348 miles.

The Works consists of three gas-making plants, viz., two vertical plants and one carburetted water gas plant with a capacity in all of approximately 6 million cubic feet per day.

A new carburetted water gas plant with a daily capacity of 2 million cubic feet is now in operation.

The extension of plant and mains is due to be considered by the Gas Committee in view of the extraordinary increase in the demand for gas.

APPENDIX No. 28

ELECTRICITY SUPPLY

(Prepared in conjunction with Mr. F. W. Brecknell, M.I.E.E., Borough Electrical Engineer.)

The Birkenhead Corporation Electricity Department supplies electricity throughout the Borough and Wirral over a total area of 62 square miles.

Supplies are received from the Central Electricity Board " Grid " at a main transforming station near the centre of the Borough, and are then distributed by a network of 6,600 volt and 11,000 volt mains to some 150 sub-stations where the pressure is stepped down for general use and re-distributed at 400/230 volt alternating current or 460/230 volt direct current.

The Direct Current system is scheduled for changeover to Alternating Current and progress has already been made in this changeover.

To large industrial users, supply is given at 6,600 or 11,000 volts and transformed on the premises. Supplies are available in every district and the industrial sites in the dock area are particularly well placed as regards the installation of electric power.

Tariffs are among the lowest in the country for both industrial and domestic supplies whilst special rates are available for certain users such as commercial, cooking, bakeries, etc., taking off-peak supplies. Prospective industrial consumers with large demands for electric power can be provided with supplies under specially favourable terms. Hire schemes provide for hire of motors, cookers and sundry domestic appliances.

A new Power Station is being built by the Corporation on a Bromborough site. This is to be commissioned by the year 1948 and will have a capacity of 200,000 kilowatts, sufficient not only for the Birkenhead supply, but in addition will feed into the " Grid " for transmission over a very large area. The Power Station will incorporate the most modern ideas on generation, the boiler plant being designed to raise steam at 900 lbs. per square inch and 900 degrees Fahrenheit.

APPENDIX No. 29

THE VICTORY CELEBRATIONS

The Victory Celebrations (August 1945) served to underline strongly three of the recommendations of this Report:

(1) *Hamilton Square should be brightened up.*

Splendidly illuminated, it was visited by many thousands from all over Merseyside, as well as by organised parties from places as far afield as the industrial towns of North Wales and South-east Lancashire. The universal opinion was that the Square was a fine centre for nocturnal civic celebration. Such appreciation by visitors should encourage the Corporation to believe that the Square has the inherent capacity to rise to a great occasion. It is also, in our view, a justification for giving it that general renovation which will make it look its best at all times and not merely under special circumstances.

(2) *The Woodside front could be illuminated to great advantage.*

As a rule, there is a marked nightly exit from Birkenhead to the Liverpool pleasure centre generally by rail. The vast crowds of Liverpool people who journeyed to Woodside night after night during the celebrations—numbers surely unsurpassed during the whole long history of cross-river transport—prove that this nightly movement *from* Birkenhead can be reversed and that Merseyside people on pleasure bent can be made much more aware of their great river.

There is an art in the display of coloured light, as has been shown; there is also especial fascination in the reflection of such light on water, to which a sea-going and river-conscious community should respond.

The recent celebrations thus confirm our belief in the desirability of a Crystal Palace on the Birkenhead waterfront. It might well be that an illuminated, self-advertising Casino at Woodside could become a very profitable civic undertaking.

(3) *Existing neighbourliness should be encouraged.*

That great neighbourliness exists in the "little streets" of Birkenhead was shown frequently during the blitz period; it was also shown by the many spontaneous and happy victory street parties held for both children and adults. The people of Balls Road East and Whitfield Street, for example, hired local halls in which to entertain their children. In Aspendale Road, Belmont, Brook Street, Cobden Street, Cyprus Street, Derby Street, Elgin Street, Gladstone Street, Paterson Street, Railway Road, Rodney Street, Severn Street, Shamrock Road, Sun Street, Woodin Road, and elsewhere, tables were laid in the open streets, and first the children celebrated and then the grown-ups. "Iced cakes, ice-cream, jellies and lemonade appeared as if by magic, to be followed by music, dancing, fireworks and illuminations. Neighbours worked hard to achieve these great results, pooling meagre rations and lending precious crockery and furniture."

These parties demanded organising ability and leadership, as well as neighbourly give-and-take. In our view, ways must be found of so rebuilding Birkenhead that these great qualities may most easily find permanent expression and be utilised for the civic good. This is the essential object of the neighbourhood units, community centres, hexagonal courts, and village greens which our Plan suggests.

GORDON ALISON & CO LTD

Shipbuilders and Engineers

ESTABLISHED in 1875, the firm of J. Gordon Alison and Company Limited was taken over by Mr. Peter Duff and Mr. E. T. Coston in 1894. During the subsequent years the plant and facilities were greatly expanded to meet the growing requirements of marine and industrial engineering, and the local call for heavier iron castings. On the retirement of Mr. Coston in 1908, the personnel of the Company changed ; Mr. Peter Duff became managing director in association with his son, Mr. John B. Duff who had considerable experience as a marine engineer with the White Star and Bibby lines.

This association continued until the retirement of Mr. Peter Duff in 1926, when Mr. John Duff succeeded his father as managing director with his brother, Mr. Norman Duff, as co-director in control of the commercial side of the business.

It was this directorship, augmented in 1938 by the inclusion of Mr. Norman Bruce Duff, which carried the firm through the precarious period of the slump and the subsequent period of increasing activity culminating in World War number two.

With the growth of the town, and the increase in docking facilities and industrialising of the area, the facilities and equipment of the firm were increased to meet the demand. Foundry facilities were installed capable of producing iron castings up to a weight of 10 tons and non-ferrous castings up to 30 cwts. ; larger and more modern machine tools to carry out necessary machine-work on large marine and industrial castings were purchased, and portable plant and special portable machine tools were developed.

Typical of the general side of their work was the supply and construction of the steelwork and castings for the Birkenhead Central and Park Stations before 1890, and which to this day bear the nameplate of J. Gordon Alison & Co. Ltd. On the Ferries, also, when the passenger accommodation of the Landing Stage was rebuilt in 1927-28 after receiving collision damage, the work was carried out by the various departments of the firm.

Similarly, in cases too numerous to detail, the services have been called to meet urgent and vital calls by the many local industrial and public utility undertakings—waterworks, gasworks, soap and margarine works, flour mills, breweries. Industry cannot afford plant to lie idle, and requires immediate action and close co-operation amongst all engaged in the event of emergency or during the brief period allowed for overhaul. A special department for factory maintenance is kept fully occupied.

The combined resources of all departments were called upon to the maximum on the outbreak of war. The first introduction, or rather reintroduction to war work—for the experience already gained during the Great War served as a nucleus, to be expanded as the technical aspect of the recent conflict became apparent—was the first conversion of trawlers to minesweepers, and it was not long before practically every type of lighter naval craft, corvettes, destroyers, frigates and rescue vessels had passed through the hands of the various trades.

It can now be stated that the conversion and fitting out with highly technical devices of two of the Combined Operations headquarters and control ships, and directing the African, Italian and Channel landings, was carried out with the closest co-operation of Admiralty and Combined Operations technical experts. Despite the heavy calls on men and machines, the requirements of ordinary merchantmen and industry had to be met.

After the local "blitzes" machines were reconditioned for neighbouring firms in the local " Emergency Service" scheme, and for the Ministry of Supply a large number of machines—many made for the first time in this country —were supplied for manufacturing a product vital to the war effort ; and it was a credit to the co-operation and resourcefulness of all engaged that many of the unusual components, unobtainable elsewhere in the country, were made on the premises.

Suffice to say of the present that the firm is busily engaged in all departments in meeting the demand for changing over shipping and industry to peace-time requirements, and serving the export market. The future is, as with every kind of activity in industries, at the present time problematical, but given the opportunity the firm of J. Gordon Alison will, by a continued policy of personal interest and supervision and co-operation, with a team of loyal and enthusiastic workers, retain its reputation among the leading marine and industrial engineering firms of the district.

ALLANSONS STORES LIMITED

IN the year 1860, when Grange Road was known as Grange Lane, John Allanson and his sister opened, on the site of the present store, a small draper's shop — no different from any other draper's shop in those days. John Allanson and his sister soon became known as the keenest drapers in the North of England, and customers came to their little shop from all over Lancashire and North Wales. From that small beginning, extending on a similar policy as that laid down by John Allanson, and added to every year by new additions to meet the growing public demand, there developed the present-day large Store in Grange Road. The history of Allansons is bound up with that of the town and the surrounding neighbourhoods of Wirral. The business of John Allanson passed through two private owners — Mr. Dean and his immediate successor — until in the year 1934 it was converted into a public company, and there are now hundreds of shareholders from all parts of the country, some of whom are the descendants of the customers of the original John Allanson. Indeed, a large number of great-grandsons and great grand-daughters of the original customers of John Allanson are now customers of the new Allansons Store.

When the Company was changed into a public company the new and progressive management at once made plans for further developments, and considerable reconstruction and extensions were carried out until 1939, when the outbreak of war put a stop to completing the extensions. Like all businesses, Allansons Stores soon began to lose many of their staff — both men and women — who went away to play their part in the national war effort — some to the Services and others to industry directly connected with the war effort. On 29th September, 1940, when the town was subjected to heavy bombing by the enemy, Allansons Stores was hit by a shower of incendiaries, causing a tremendous fire which destroyed nearly half the building and much valuable stock. This was a setback not easily overcome owing to lack of essential building materials, but a great effort by the then existing staff enabled the store to operate fairly normally within a short space of time.

The present store is operated on two extensive floors, with excellent light to all parts, where every clothing requirement of man, woman and child, and everything required in the furnishing of a home can be purchased. As soon as building permits can be obtained the store will be further developed and advantage taken of any known advance in store equipment. For over eighty years people have learned to depend on Allansons and the policy of the present management is to hold and foster the confidence of the great public whom they are privileged to serve.

THIS IS THE ORIGINAL SHOP OF JOHN ALLANSON

THE BIBBY LINE

IN 1807 Mr. John Bibby established himself as a shipowner, his fleet consisting of small sailing ships. A service to the East Indies was commenced in 1821 by means of these sailing ships, and it was thirty years later that the order for the first two steamers was placed. These initial vessels were named *Tiber*, *Arno*, followed by *Sicilian*, *Venetian*, *Syrian* and *Egyptian*. The Company then commenced operations in the Mediterranean, carrying cargo from the Mersey to and from all the principal ports, this of course being anterior to the opening of the Suez Canal.

It was, however, in 1891 that the Company's regular service to Egypt, Colombo and Rangoon was established, and the ships named after English Counties. Commencing with a monthly service, the growth of the passenger and cargo trade justified not only the building of larger ships but the maintenance from 1894 of three-weekly sailings. Some years later the programme was altered to fortnightly departures, which continued right up to the outbreak of war in 1939, with the enforced interruption of the Great War, 1914-1918.

Now the association of the Bibby Line with the Birkenhead side of the Mersey may be said to date back to the foundation of the Company, for the sailing ships of Mr. John Bibby plied between Parkgate and Dublin, and in fact carried the mails. The first actual appropriation of a cargo berth in the Birkenhead Docks was in January, 1892, when the East Side of Vittoria Wharf was reserved for the sole use of the ships of T. & J. Brocklebank and Bibby Bros. & Co. Eight years later Brocklebank moved and their place was taken by Lamport & Holt.

In 1906 Bibby Bros. transferred to North Side, Alfred Dock, migrating to Mortar Mill Quay in 1909. There they remained until 1940, with a short break (1918-1919) when they occupied West End, Vittoria Wharf. The abandonment of Mortar Mill Quay in 1940 was due to the fact that the whole of the Bibby fleet was serving as armed merchant cruisers, troop and hospital ships, and therefore the Company was unable to justify the retention of a cargo berth and surrendered it voluntarily.

For the resumption of its trade with Egypt, Ceylon and Burma, the Company came to the conclusion that the berth known as the East End, North Side, West Float, would be eminently suitable, and they have joined forces there with P. Henderson & Co., of Glasgow, whose ships have utilized the berth for many years.

It will thus be seen that the Bibby Line ships have used the Birkenhead Docks for a period extending over fifty years, during which they have had close contact with and given much employment to the inhabitants of Birkenhead itself. Not only have the cargoes been loaded at Birkenhead berths, but much repair work, the dry-docking and overhauling of the ships themselves, has been carried out by firms domiciled in and employing Birkenhead workpeople.

Before the war the Bibby ships used to sail from Birkenhead regularly every fortnight, having embarked their passengers in the berth, and the Company look forward to the day when this will be possible once again.

Liverpool is the port of registry of the Bibby ships, but thousands of travellers will always associate them particularly with Birkenhead.

Herefordshire leaving Birkenhead Docks for Ceylon and Burma.

BROCKLEBANKS & BIRKENHEAD

WHEN the Wallasey Pool, now the East Float, was still a creek of the Mersey, Brocklebanks were building their own ships at Whitehaven and trading all over the world ; 160 years ago their vessels were sailing in and out of Liverpool.

Daniel Brocklebank, son of a Cumberland clergyman, founded the firm and after training as a shipbuilder, he went to America, starting constructing ships there in 1770, but five years later, when the War of Independence broke out, he took command of the brig *Castor* of 220 tons, which he had just completed, and returned to Whitehaven. There he had a number of ships built for him until 1788, when he established a Yard, and later a Ropery ; up to 1865, when the Yard was given up, the firm built no less than 153 wooden vessels, the majority for their own services. Daniel Brocklebank died at Whitehaven in 1801, aged 60, when his sons, Thomas and John, continued the business, but under the title of Thos. & Jno. Brocklebank, the name by which it is known today.

The Birkenhead Dock system came into operation in 1847, when Brocklebanks had a fleet of over 40 sailing vessels, the larger ships all well-known in their time : such as the *Hindoo*, *Jumna*, *Patna*, *Patriot King*, *Patriot Queen*, *Thomas Brocklebank* and *Tigris*, trading between Liverpool and Calcutta, the firm's service there having been inaugurated in 1813. When the ship *Princess Charlotte*, of 514 tons and with a capacity for about 800 tons of cargo was launched at Whitehaven two years later, she was considered to be one of the largest and finest merchantmen of her day.

As the years went by, larger vessels built at Whitehaven were commissioned, but in the early 1860's iron ships were ordered from Belfast, and finally steel was employed in their construction. In 1887-88 Harland and Wolff built for Brocklebanks the well-known four-masted barques *Sindia* and *Holkar*, each of 3,000 tons and carrying some 4,500 tons cargo ; they were then the largest sailing vessels in the world.

For well over a century Brocklebanks were merchants as well as shipowners, and carried very large quantities of cargo on their own account, but with the turn of the century the firm sold all their sailing vessels and continued the trade with steamers. The firm introduced their first steamer into the Indian service in 1889 ; the *Ameer* was then a modern freighter of 4,014 tons, and proved a pioneer of the many vessels which were later brought into the Eastern trade by other companies.

Brocklebanks took over the Calcutta service of the Anchor Line in 1912 and so have the largest interest in the trade from the West Coast ports of U.K. to Calcutta : the vessels load at Glasgow and complete at Birkenhead. From the East Coast they have regular sailings from Middlesbrough and London to Colombo, Madras and Calcutta. A service was commenced in 1924 from Calcutta and Colombo to the United States of America, the steamers returning thence to the United Kingdom.

The Brocklebank steamers are easily recognised by their black funnels with bands of white and blue—the colours of the firm's well-known House Flag, which is always flown from the foremast. The origin of this interesting and unusual practice has never been satisfactorily traced : it goes back to the firm's early days and the reason for it is lost in antiquity. Like their early clipper sisters, the vessels have a broad white band round their black hulls.

The firm lost some sixty per cent. of their fleet by enemy action during the recent war, but seven fine fast cargo liners have been commissioned since the war began, and others are under construction while two large steamers have been bought from the Government. Now they all bear Indian names, the latest being the *Maidan*, of 8,533 tons gross and 11,535 tons deadweight. Oil-fired water-tube boilers supply steam to her turbines, and diesel driven generators provide the electric current for her auxiliary machinery, steering gear and winches.

For nearly sixty years now the Company's steamers have been loading at Birkenhead for Calcutta, their cargo consisting of chemicals, machinery, motor cars, railway material and manufactured goods of every description. Manganese ore and pig-iron are brought back to Britain from India.

Brocklebanks claim to be the oldest ocean-going British Shipping Company in the world, having been continuously operating vessels for the long period of 177 years.

THE BIRKENHEAD DOCKS

THE transfer of the Birkenhead Dock Estate to the Mersey Docks and Harbour Board in 1857 has been of incalculable advantage to Birkenhead. Its proximity to Liverpool and the fact that the Docks in both towns are under one control, render the riverside portions of the town a community of the Merseyside Port as a whole.

The natural basis of the Birkenhead Docks was a creek or arm of the Mersey, some three miles long, spreading twice its length to great width. This conformation has been preserved, and the two wide expanses are now the two main basins from which seven wet docks and three dry docks branch. In the early stages the low-water basin was a source of extraordinary trouble and labour. The foundations were of the most treacherous character and the work had to be constructed on a forest of piles. In September, 1863, the basin was completed, being opened on the occasion of the visit of Admiral Dacres, commanding the Channel Fleet. In January, 1864, an attempt was made to work the gigantic system of sluices designed by Rendel to keep the basin clear of silt and to maintain it at a depth of 10 feet below the level of the lowest tides, but the result was unsatisfactory. The sudden change of level in the Great Float and the enormous rush of water from the entrance seriously endangered the safety of vessels. The Board then decided to convert the basin into a wet dock, which as altered now forms the Wallasey Dock. The great Northern entrances and the Alfred Dock having been completed were formally opened by H.R.H. the Duke of Edinburgh on the 21st June, 1866.

The Alfred Dock has been lengthened and deepened, and maintains the connection between the Great Float and adjoining docks and the river. A dock, called Vittoria Dock, has been constructed on the side of the Vittoria Wharf. The entrance to this dock is from the East Float. The dock is provided with single-storey sheds, 100 feet wide, on its quays. The dock wall at the East end of the North Quay on the West Float has been raised, and two new single-storey brick sheds, fitted with up-to-date electric quay cranes, have been erected thereon.

Under the Board's post-war improvement scheme for Birkenhead is a plan for the modernisation of the Vittoria Dock. The proposal is to widen the South Quay of the East Float adjacent to Vittoria Dock by 50 feet, so affording ample room for the construction of new sheds on this quay and also on the North Quay of the dock, and ample margins have been allowed for the accommodation of up-to-date electric cranes and a wide roadway between the sheds. The South Quay of Vittoria Dock will also be widened in order that electric quayside cranes can be operated. Greatly improved rail and road facilities will be provided to encircle the whole of the dock, including road access from the Duke Street gateway as well as from the existing entrances at Vittoria Street, thus providing greater facilities for the use of the dock by the larger vessels engaged in the Far Eastern trade.

Birkenhead has its special characteristics both as part of the Port of Liverpool and as an industrial centre. The shipping firms whose principal trade is with the Far East sail mainly from the docks on the Birkenhead side, as also do the steamers loading for South Africa—the trade with which Union is expected to reach record proportions during the next few years. Both Great Britain and South Africa are vitally in need of each other's products. Britain requires vast quantities of copper, hides, asbestos, wool, fruit and meat, and other raw materials produced by the Union. In return, South Africa is looking to Britain to replenish her shortage of manufactured articles : machinery, textiles, earthenware, glassware, chemicals, drugs, fertilizers, woodware, hardware, hollow-ware and vehicles, to name but a few, and a large proportion of these goods will be shipped from the Birkenhead docks.

The leading flour millers have been long established at Birkenhead, and their output is the largest in Europe and second only to that of Minneapolis throughout the world. The lairages and abattoirs which accommodate the vast livestock importations of the Port are also situated at Birkenhead, as also are the important shipbuilding yards of Cammell, Laird & Co. Ltd. and the ship-repairing works of Grayson, Rollo & Clover Docks Ltd.

Summing up, those responsible for the management of the Port are doing their utmost so to plan that their scheme will fit into whatever form the post-war trade of the world may emerge. It is for the user of the Port—shipowner and trader, employer and employed—to do their part by co-operation and broad outlook to maintain Merseyside as the Sea Port of Industrial England.

BIRKENHEAD & DISTRICT CO-OPERATIVE SOCIETY LTD

THE Birkenhead and District Co-operative Society Limited was established in 1891 and, after the first year of trading had a membership of 315 and share capital of £380, whilst the sales during this period amounted to over £4,000. The progress that has been made since then, i.e., by the end of 1945 the membership had increased to 78,920, the share capital to £2,195,294, and annual sales of £3,286,000 were recorded—is proof that the Society can claim to be the premier retail trading concern of the district.

Fifty-four years of trading has produced a great shopping institution unequalled in Wirral, despite the storms of two world wars and years of depression, a network of 180 shops having been built up, serving the needs of members and enabling them to share in the surplus from trading in the form of dividend on purchases, which now averages £298,000 per year, whilst the interest paid on the savings of these members, invested with the Society, amounts to over £80,000 per year, which, even the layman will agree, is an excellent return on a sound investment. The advantages obtained from being a trading member are as many and varied as are the services which the Birkenhead and District Co-operative Society undertake, every conceivable want and daily requirement of the family being catered for, from necessities to luxuries, without overlooking that more melancholy but very necessary service of funeral furnishing. The growth of these activities and the business of the Society as a whole, guided by a wise policy of management, is illustrated below in the 1945 results of three departments, without delving into a mass of statistics concerning every sphere of every department.

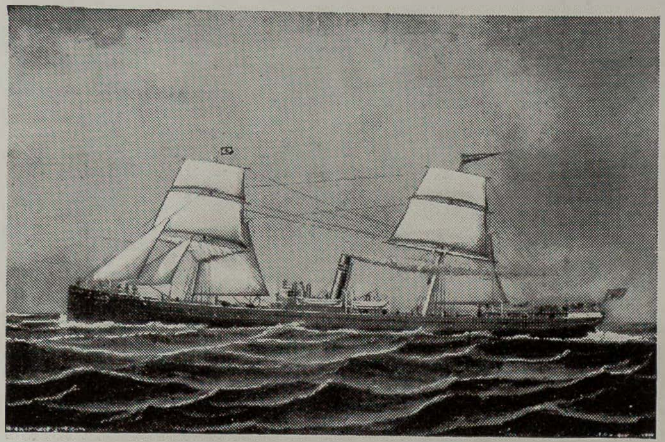
DAIRY	From the ideal model dairy at Swan Hill, Prenton, designed, equipped and run on the most hygienic lines, 3,264,964 gallons of pasteurised milk, the purity of which is guaranteed by constant tests in the Dairy's own laboratory, were distributed.
COAL	88,256 tons of coal were delivered to members throughout the year, despite the rigid rationing by the Ministry of Fuel.
BAKERY	The equivalent of 190,000 two-pound loaves weekly were produced at the Bakery, the largest and most up to date in the area.

Other aspects of the Society's business which at first seem unimpressive and unimportant, take on a different light when viewed from the eyes of the person who derives the benefit. For example, let us quote—the Clothing Club, which has operated now for a considerable number of years, enabled members in the last twelve months of 1945 to acquire immediately nearly £120,000 worth of clothes ; whilst the Collective Life Assurance Scheme (qualification for which is trading membership only, without premiums) benefited 1,256 members to the value of over £10,000 during last year at a time when their need was really great, i.e., at the time of bereavement.

This great concern, however, has not confined itself solely to trading, but also has fostered the educational and social life of the community by the promotion of an Educational and Recreational Centre in Park Road South, Birkenhead. Here, members and their families can enrich their minds in the problems of citizenship, Discussion Groups, Youth Clubs, Week-end Schools and Classes in Social Science, all educating in and helping them to understand and cope with the problems of home and foreign affairs. The entertainment side has its attractions in the form of a Dramatic Society and Youth Drama Club, both of which provide many hours of occupation and enjoyment for both young and old, whilst outdoor activities are well catered for in the form of bowling greens and tennis courts.

But the Birkenhead and District Co-operative Society is first and foremost an efficient and comprehensive business organisation, run on the Co-operative principle of mutuality for the benefit of the people, dispensing its surplus to those who made it and thus, in its own way, easing the economic struggle of those none too richly endowed with this world's goods. But although a business organisation, the business is done against a background of humanity and life, for man cannot live by bread alone, and a valuable contribution to the educational and social life of its members is combined with this business. The Society maintains and nourishes a comradeship which stimulates civic pride and develops social service and educational ambitions and is proud of being a successful business and a beneficent influence in the town.

CLAN LINE



1878 *Clan Lamont.*

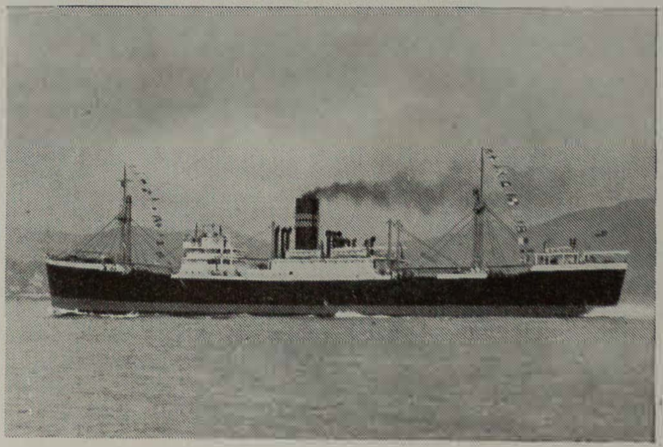
THE story of the Clan Line is one of many stories of great firms which have been built up by private enterprise, whose founders, and those who succeeded them, by initiative, courage and vision promoted the prosperity of Britain and made her the foremost country in industry and commerce.

The founder of the Clan Line, Charles William Cayzer, began his career as a ship-owner in 1877 with two small wooden vessels which were loaded at Liverpool for India, and, from this small beginning the Clan Line developed till today it has services not only to India but to South Africa and Australia, maintained by the finest fleet of cargo ships in the world. It was in 1878 that Cayzer first embarked on his shipping project on an ambitious scale, when he and William Irvine planned for the future in a small, old, two-storeyed house at the back of the Liverpool Parish Church. Irvine died shortly afterwards, but his name is still retained in the title of the Company. Six first-class steamers were ordered, and the pioneer ship, *Clan Alpine*, launched in September, 1878, was the first to bear the Clan names which have always distinguished the firm's ships. Approximately at monthly intervals the other five steamers were launched, and thereafter the Clan Line, even at that early stage, never employed any other but first-class tonnage, built to the firm's own specifications. Besides employing modern ships, Cayzer, Irvine and Co. instituted changes and were the first to institute present-day ship practice. They abolished the old custom of leaving the masters of their ships to do all the work of chartering and fixing cargoes, establishing agents who ensured a more satisfactory and economic dispatch. The results in the Clan Line were visible in the greatly increased amount of cargo carried and in the numerical strength of the fleet, which in those early years (1878-1882) increased rapidly. In five years the Company built 22 new steamers, all finding regular employment.

Within twelve months of the first ship being dispatched to Bombay, the Clan Line had instituted a fortnightly service between Liverpool and India, and shortly afterwards inaugurated a service to South Africa, the first sailing being taken by the *Clan Lamont*, and at monthly intervals this ship was followed by seven others. In 1882 a further service was started to Colombo, Madras and Calcutta. In that year the firm built nine new steamers to cope with expanding trade. A joint service was established with the Union Line from New York direct to South and East African ports, and subsequently the Indian Services from the United Kingdom were developed to include the Malabar Coast and Chittagong, with sailings from London and East Coast and West Coast ports.

In the course of trading between Empire ports and the United Kingdom, the firm's ships carry vast quantities of valuable cargo that comprises nearly everything required by mankind—foodstuffs, raw materials, and manufactured goods from locomotives and motor buses to ploughs and shovels. The design of the vessels has always been distinguished, and has from time to time aroused almost as much interest as that taken in the appearance of the crack passenger liners. It is doubtful if any shipping company has rendered more useful service to the nation during the war years than the Clan Line with its fast cargo ships, invaluable for special service such as the Malta convoys and other such tasks. The losses have been severe, no less than thirty-six ships being sunk in the late war.

The prosperity of our country, and the prosperity of shipping, depend upon our export trade, for without exports we cannot pay for imports, but the Directors of the Clan Line have a firm belief in the ability of our country to surmount the many present difficulties, and their belief is evidenced by the purchase since the War of a number of fast up-to-date ships, and the placing of orders for others, some of which are now in service, whilst others are building.



Clan Lamont. 1946

CAMMELL LAIRD & CO LTD . . . .

STARTING as a small yard on the banks of the River Mersey more than one hundred years ago, the shipbuilding and engineering firm of Cammell Laird & Company Limited has extended to embrace an establishment covering 114 acres of land with a river frontage of 3,100 feet and has created for itself a record of achievement which few, if any, firms can equal.

The undertaking now trading under its present name originated in 1837 when Mr. Charles Cammell and Mr. Thomas Johnson commenced business in a small way as steel and file manufacturers in Sheffield, calling themselves Johnson, Cammell & Co. In 1855 the style of the firm was changed to that of Charles Cammell & Co. and registration under the Companies Act was effected in 1864. However, in 1824 Mr. William Laird had opened his yard in Birkenhead and his business of Laird Brothers rapidly became well known in the shipbuilding world until in 1903 the amalgamation with Charles Cammell & Co. took place. It was in that year that the Company changed its title to Cammell Laird & Co. Ltd.

Since that small beginning in 1824 the keels of 1,187 ships have been built and the reputation of the firm has become known throughout the world. The firm were pioneers in the application of iron to shipbuilding, their first iron vessel having been built in 1829. This was a lighter, 60 feet long with a beam of 13 feet 4 inches and of 50 tons measurement. They were also the pioneers of steel shipbuilding, for in 1858 they built the steel paddle steamer *Ma Robert*, in which Dr. Livingstone carried out his memorable work on the Zambesi. This was a year before the first steel ship, the *Windsor Castle*, was built on the Clyde. The firm have always been in the forefront in the application of new developments to the design and construction of ships and their machinery.

The first steamer built by the firm was the *Lady Lansdowne*, a cross-channel vessel for the City of Dublin Steam Packet Company, a type of vessel with which the Company have been particularly successful throughout their long career. In 1838 they also built the first screw steamer to cross the Atlantic, the *Robert F. Stockton*. They have been instrumental in the development of nearly every other type of vessel for the Merchant Service and have a wide and varied experience of modern vessels for this purpose, ranging from large passenger and cargo liners to channel steamers, dredgers and smaller vessels for river and ferry services.

In addition to vessels for seagoing trade the firm build dredgers, typical of which are the large sand pump hopper dredgers which they have constructed for the Mersey Docks and Harbour Board, the controlling authority of the Port of Liverpool. One of these vessels will lift 10,000 tons of sand, and others about 3,500 tons of sand, and are outstanding among this class of vessel. The firm also construct ferry steamers with either screw or paddle-wheel machinery, including train ferries, tugs, hoppers and other river craft.

For many years the firm has taken a leading part in the design and construction of warships, their connection with the British Admiralty having commenced as long ago as 1840. In the early 'sixties they were largely instrumental in bringing about the introduction of armour-clad turret ships, the precursors of the modern dreadnought. The firm was also closely associated with the development of the torpedo-boat destroyer, being one of the three firms whose designs were accepted by the British Admiralty (in 1893) for the first vessels of this type ever constructed, and since that time over seventy destroyers and flotilla leaders have been built, some of these being the pioneers in their respective classes.

Before the commencement of the first world war the firm turned their attention to the construction of submarines, and since that date a number of vessels of this description have been constructed and satisfactorily completed for the British Government, the engines being also manufactured by the Company. Besides the ships that have been constructed for the British Admiralty a number of war vessels have been built for foreign governments including Argentine, Russian, Bolivian, Brazilian, Chilian, Dutch, Greek, Portuguese and Peruvian.

In addition to the new construction work a very important repair business is carried on by the Company. Owing to the numerous Graving Docks and Wet Basin, ships of the largest size using the Port can be dealt with in the minimum time and at a minimum cost to owners.

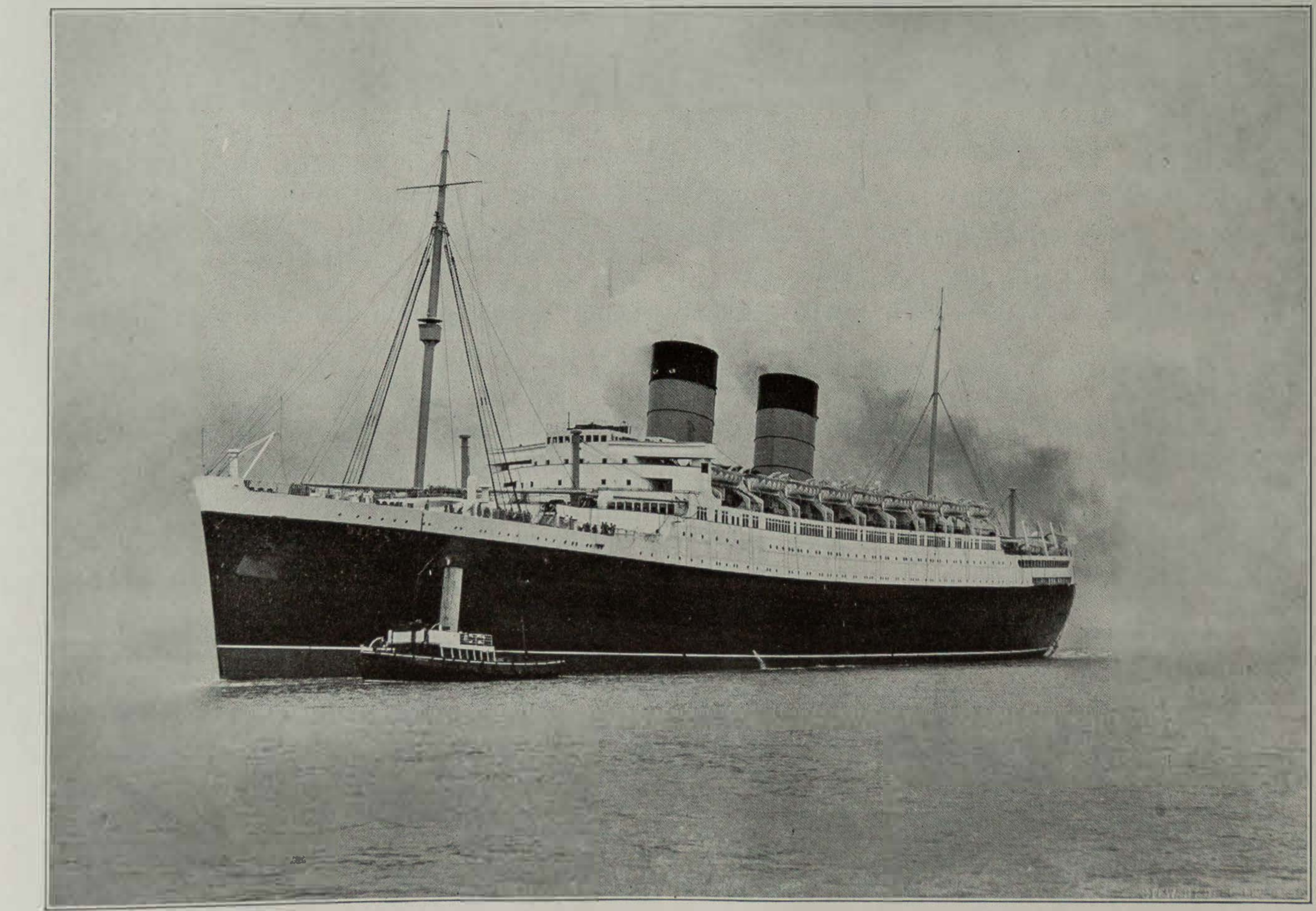
The works is one of the largest and most modern in the United Kingdom. There are ten building berths, ranging up to 1,100 feet in length, all of which are provided with overhead cranes and the latest devices for rapid handling of material. Situated in the premises are seven Graving Docks, the largest of which is over 860 feet long, and a fitting-out basin of 15 acres water area, with ample quay space for the largest vessels, each quay being provided with electric cranes for the rapid handling of building material. The entrance to the basin is 140 feet wide and it is closed by means of a sliding pontoon. In addition to the fixed crane of 100 tons lifting capacity there is also a floating crane having a lifting capacity of 200 tons which can be speedily brought alongside any vessel in the basin where heavy armament, machinery or boilers are to be shipped.

The works throughout are equipped not only for the use of electric power but for compressed air and hydraulic power, and a very large installation of low-pressure electric mains is installed for electric welding in all departments. A special study has been made in the development of this method of construction in the shipbuilding and other departments.

The gross tonnage which can be produced annually is over 100,000 tons, while the engineering work are capable of producing machinery and boilers equivalent to over 450,000 horse-power and approximately 10,000 employees are occupied on the building berths and in the various workshops. It is safe to say the prosperity of Birkenhead as an industrial town is permanently bound to the prosperity and working capacity of Cammell Laird & Co. Ltd. — they rise and fall together.

Perhaps the most notable ships built by the Company include the 34,000 ton passenger liner *Mauretania* (whose graceful lines and size are beautifully illustrated in the picture below), the 35,000-ton battleship *Prince of Wales*, and the *Ark Royal*, great 22,000 ton-aircraft carrier whose wonderful record in the last war was household knowledge. The *Mauretania* is the largest mercantile vessel ever built in England, and in herself forms a striking tribute to the capabilities of the firm.

The firm's shipbuilding contribution to the war effort in the last conflict was unsurpassed throughout the country. In addition to a large number of small craft, the Company built for the Admiralty throughout the war no fewer than 86 ships, which included one battleship and two aircraft carriers, and carried out major repair work on many others. Thousands of merchant ships were also docked and repaired during the six years of war.



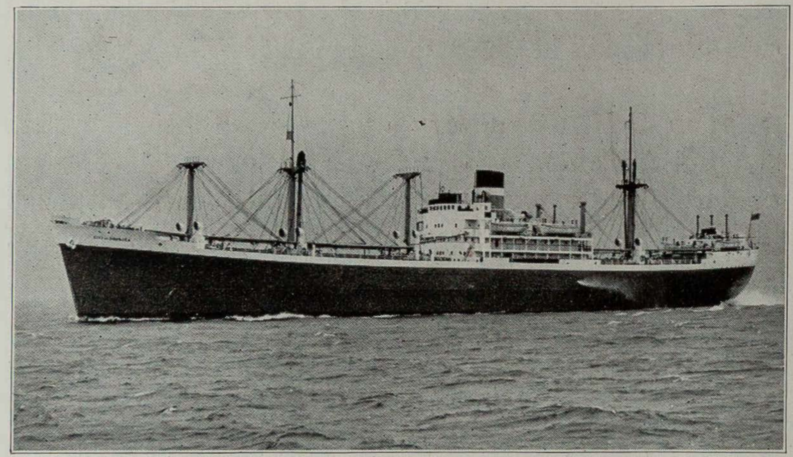
R.M.S. "Mauretania" Built at Birkenhead 1939

CITY AND HALL LINES

AMONG the pioneers of the shipping companies associated with Birkenhead none can claim closer connection than the City and Hall Lines, which up to the beginning of the present century operated as separate companies but now form part of the Ellerman Lines Group. Both Lines started from small beginnings and have to their credit a long record of successful progress.

The City Line originated in Glasgow in 1839 as the venture of merchants when George Smith and Sons, the founders of the Line, acquired the barque *Constellation*, 344 tons register, and despatched her from the Clyde to Calcutta early in April, 1840. Encouraged by the continuous success of their ventures, they decided in 1848 to enlarge the scope of their operations and started their association with the Mersey by loading the *Majestic* (560 tons registered) in Liverpool. The same year they built a full-rigged ship of 519 tons which they named *City of Glasgow* and thus introduced the distinctive system of nomenclature which has continued ever since and from which the Line subsequently derived its title. Steady progress continued, and in 1870 there were 36 " City " vessels—one of the finest fleets of sailing ships in the world.

During this period the Hall Line was operating from Liverpool with the *Bavelaw* (1,319 tons) *Bayard* (1,034 tons) and other sailing ships under the management of Messrs. Alexander & Young. This partnership continued until 1869 when Mr. Alexander decided to carry on operations under the style of Robert Alexander & Co. with the definite object of running a fleet of Hall ships. The first was the *Locksley Hall* (1,293 tons) and she was quickly followed by the *Eaton Hall*, *Knowsley Hall*, etc. A steamship *Rydal Hall* (2,114 tons) was also built in 1870, but within two years she was sold and replaced by a sailing vessel of the same name.



m/v "City of Swansea." Loaded at Birkenhead on maiden voyage, May, 1946.

With the opening of the Suez Canal, the City Line ordered four steamers, the first of which was the *City of Oxford* in 1870, whilst their then Liverpool rivals decided upon the construction of three steamers, *Branksome Hall*, commissioned in 1875, and her sister ships *Trentham Hall* and *Childwall Hall*. A period of steady progress now remains to be recorded, each succeeding year witnessing additions to the Fleets. The City Line specialised in their services to Calcutta and Bombay, and the Hall Line concentrated upon Bombay and Karachi, the latter being adopted as a regular port of call in 1880. Larger steamers replaced their earlier sisters, and the Lines established a well-earned reputation in the Indian trade, both with passengers and cargo.

At the beginning of the present century the two Lines were taken over by the late Sir John Ellerman, Bart., and another phase of their history can be said to have commenced. So far progress had been sure and steady, but under the control of Sir John Ellerman the growth of the Lines was phenomenal. An intensive building programme was undertaken and every succeeding year marked an increase in the steamers of the fleets, each an improvement on its predecessor. It was during this period that the *City of London* and *City of Paris* made their maiden voyages in 1907, and by reason of their speed, size and passenger appointments, immediately brought fame to themselves and their owners. The trades also were expanded to cover additional Indian ports such as Marmagoa, Malabar Coast Ports, Madras, etc., as well as the establishment of services to South Africa, East Africa and Red Sea Ports.

In the trying and critical periods between the two world wars, the City and Hall Lines stood the test and, despite difficulties, maintained their full services with regularity and efficiency. After the close of the 1914-18 war many new steamers were added including such well-known passenger vessels as the *City of Paris*, *City of Nagpur* and *City of Simla*, and the year 1936 saw the maiden voyage of the *City of Benares* which immediately became a most popular and well-known ship. Unfortunately this fine vessel met an untimely fate in the North Atlantic through enemy action.

To replace the losses sustained in the recent war, ten new vessels of the most up-to-date type have so far been brought into commission — some, such as the *City of Durham*, *City of Swansea*, *City of Chester*, *City of Carlisle*, *City of Bristol*, having already made use of Birkenhead for loading purposes.

GRAYSON, ROLLO & CLOVER DOCKS LTD

Shiprepairers and Engineers

IN 1948 Messrs. Grayson, Rollo and Clover Docks Limited complete two centuries of ship-repairing activity on Merseyside, and although their early history is mainly concerned with shipbuilding on the Liverpool banks of the river, the name also reaches far back in the annals of Birkenhead. It was Charles Grayson who, as a result of continuous labour disputes among the Liverpool shipwrights, crossed the Mersey in 1821 and opened a new shipbuilding yard at Tranmere. Here, among other vessels, he built one of Birkenhead's earliest ferry steamers, the wooden paddler *Abbey*, 53 tons register, with engines of 22 horse-power, launched in 1821.

Messrs. Graysons can thus claim to be pioneers of steamship construction on the Wirral side of the Mersey. They also have later associations with the borough. When labour conditions at Liverpool became more settled, Charles Grayson closed his Tranmere yard, but his venture led others to settle at Birkenhead who were destined to contribute substantially to local industrial development, and who were later merged into the present firm. Within a few years Robert Russell and Sons had commenced building, and in 1843 they took in another partner, William Ashley Clayton. This firm later became W. A. Clayton and Company, and from their slipways were launched some very fine craft, both steam and sail. In the early fifties Clayton formed a partnership with Edward M'Keverigan, and they leased from the Liverpool Corporation the three new graving docks then adjoining the old Monk's Ferry. Opened in 1856, these docks had direct entry from the river, and their respective lengths were 365, 290 and 210 feet—the largest having a width of 84 feet and depth of 19 feet.

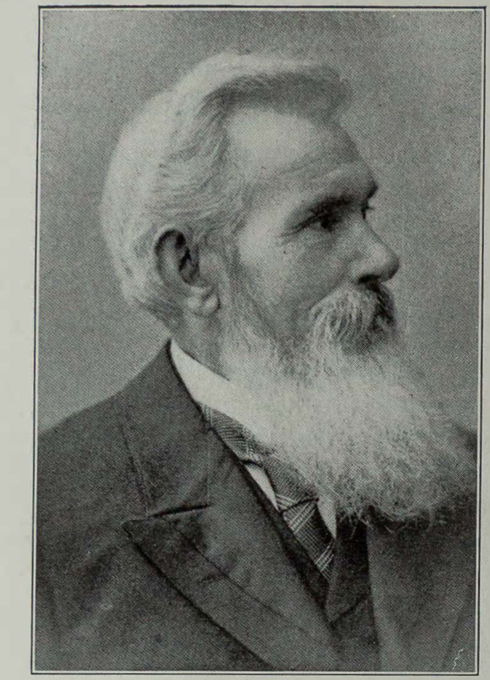
Another Liverpool shipbuilding firm attracted to Birkenhead about the same time was Matthew Clover and Company, of which George R. Clover was then principal. Having taken Joseph Royle into partnership, as Clover and Royle they occupied three new graving docks adjoining the Woodside Ferry, the largest of these being advertised as having 700 feet length of docks. In those days G. R. Clover lived at Highfield, Oxton, but later moved to Claughton.

Both the Clayton and Clover firms sent down their Birkenhead slipways many splendid iron sailing ships and steamers, among the latter being the *St. Louis*, the pioneer vessel of the famous Dominion Line, which was launched by Clovers in 1870. The two companies also carried out extensive repair works and became considerably proficient in "ship surgery" at a period when there was much lengthening of steamers after introduction of the compound engine. In the early seventies, however, they amalgamated as Clover, Clayton and Company, and continued shipbuilding until the yards were closed down, when the business became primarily that of engineering, ship-repair and docking.

In 1911, Clover Clayton and Company were taken over by H. and C. Grayson who, throughout the last century had built up a most extensive business at Liverpool and Garston, and had also acquired slipways and works at the West Float, Birkenhead. They also took over the engineering business of Geo. A. Harradon and Company. In addition, they had absorbed W. H. Potter and Company, the well-known Liverpool shipbuilding firm, founded about a century ago ; and in 1920 Graysons also acquired an interest in the Liverpool engineering firm of David Rollo and Sons, whose marine engines and other machinery were fitted to some of the finest steamers of their day. Eight years later, the three main companies were merged into one entity as Grayson, Rollo and Clover Docks Limited.

Thus, two centuries of the shipwright's skill and versatility lie behind this great organisation, in addition to an engineering tradition second to none. Today, their Birkenhead docks and workshops are as efficient as modern enterprise can devise, and they afford very substantial local employment. The firm's achievements at Birkenhead during the recent war have yet to be fully recorded. Suffice it to say that their docks and establishments were maintained continuously at high pressure and efficiency throughout those years, and are still fully occupied with this most important department of our sea-borne trade. Some of the toughest wartime repair jobs were carried out successfully at Birkenhead, and they testified to the highest standard of competency and craftsmanship on the part of both the indoor and outside staff—a record rivalling that of other large maritime centres.

THE HOUSE OF McIVOR 1866 — 1947



Robert McIvor

IN 1866 Robert McIvor came to Birkenhead from Wick, Caithness, with a view to trying his fortune in America. While waiting for a passage to America he obtained employment in Birkenhead and decided to stay there. Very soon he started a small business of his own as a general contractor and in a short time had begun to interest himself in the "lagging" of boilers and steampipes. One of his first contracts in this new venture was with the Blue Funnel Line, a business connection which has continued ever since without a break. He could not have foreseen in those far-off days that in eighty years time his descendants would still be carrying out a similar class of work in a more advanced form on a much larger fleet of Blue Funnel liners.

In 1889 Robert McIvor was joined by his eldest son, William Tough McIvor, who had already served his apprenticeship as an engineer and had obtained his " chief's ticket " after five years seagoing experience with the P.S.N.C. and the Orient Line. During these years the business had expanded and Robert McIvor had also taken an active interest in the religious and civil activities of the town. The end of the nineteenth century found him a Town Councillor representing Cleveland Ward where his works were situated.

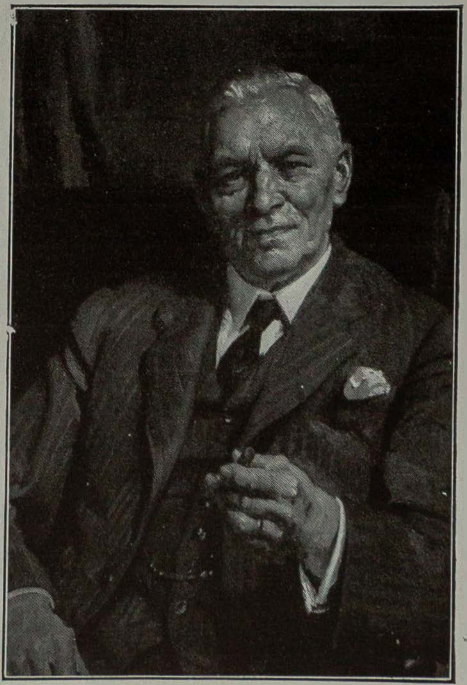
In the early nineteen-hundreds the laying of magnesite composition flooring was introduced in the trade-name of " Dexton," and during the years that followed up to 1939, when supplies of materials were restricted, the decks of hundreds of ships, as well as innumerable land sites, were laid with this material.

It was during this period of expansion that the firm of R. McIvor & Son, as it was then called, was joined by Alfred Stewart McIvor, a younger son of Robert McIvor, who concerned himself mainly with the internal organisation and later became a Director and Secretary when the firm became a limited liability company in 1906. On the death of Robert McIvor in 1911, W. T. McIvor became Chairman and Managing Director, and the business continued to expand under his direction.

The heat insulation side of the business was extended to cover cold storage requirements, and many successful insulation contracts have been carried out on ship and land installations. The manufacture of small sectional refrigerated cabinets and rooms for shops, cafes, canteens, etc., has also been included in the list of the firm's activities. During the past quarter of a century the firm has also built up a very successful sheet metal working department for the manufacture of such articles as ventilating ducting, elevator and conveyor casings, chutes, hoppers, storage bins, clothes lockers, racks, shelving, ventilating cowls, dust-collecting cyclones, etc. ; in all metals and all thicknesses from 24 gauge to one-eighth of an inch.

In addition to this, all kinds of light angle-smiths' work, electric, oxy-acetylene and spot-welding work, light pressing and stamping, are undertaken, while the firm is also able to offer a highly skilled and experienced drawing office service to such of its customers who have no such facilities, or whose own drawing office cannot cope with their own requirements.

The transition period from war to peace finds the firm still busily engaged with ever-increasing enthusiasm and optimism, and visitors to its offices and works will still find awaiting them a friendly welcome and a ready smile.



W. T. McIvor, J.P.—*from a portrait by Mr. Will C. Penn, M.C., R.O.I., presented to him by the Birkenhead Chamber of Commerce.*

JAMES McKENZIE LTD . .

A short history of a progressive business

IN the recent history of the development of Birkenhead, a place has been securely carved for itself by the Electrical and Radio firm of James McKenzie Ltd.

Founded over fifty years ago by Edward Preston, the business was taken over shortly after the first world war by its present Managing Director, Mr. James McKenzie, whose acknowledged ambition it was, and still is, to give the public an Electrical and Radio sales and service second to none in the industry.

Mr. James McKenzie, the present Chairman and Managing Director of the Company, had originally been apprenticed to Mr. Preston, and he embraced the opportunity of the war years 1914-1918 to widen his experience ; first in shipyard electrical work and later, on technical duties in the Royal Flying Corps, so that he was prepared and eager to use his energy and ability in re-vitalising and extending the organisation after its unavoidable war time dislocation.

By 1929 the Company's steady expansion had necessitated a very considerable enlargement of the premises in Grange Road West, which are still retained as the principal centre of the retail section of the business. In 1938 it was found desirable to stabilize the basis of the undertaking by the flotation of a private Limited Company with Mr. James McKenzie as Chairman.

In order to afford a more comprehensive service to its customers throughout the Wirral, the Management of the Company decided to provide local branches outside Birkenhead itself, with the result that shops at New Ferry and Hoylake were opened, and others elsewhere contemplated when the second world war broke out.

In September, 1939, the Firm's staff changed over night to a war time setting in order to do its utmost in the perilous times that lay ahead.

For many years the contracts executed by the Company had included electrical repairs to Naval and Merchant vessels, and although the retailing and industrial side had been the principal objective, with the advent of war the Directors realised that the undertaking must be prepared to do its utmost in the coming war effort, and henceforth its resources were centred unsparingly upon ship repair and general Admiralty work.

As the war progressed a specific organisation was carefully built up for such responsibilities, and with a staff of several hundred employees, most involved and extensive commitments were undertaken ranging from an electrical refit on the largest battleship to the construction of midget submarines used for special operations. In addition contracts were successfully carried through for the fitting of radio telephony in large numbers of Churchill and Sherman tanks.

The Company's personnel included specialists in Radar, Asdic and other technical equipment and appliances of modern naval warfare, and the Directors are naturally very proud that one of their number, Mr. H. G. Nicholas, was awarded the M.B.E. for his outstanding war services.

The Company suffered its share of war damage during the enemy raids of 1940 and 1941, and was obliged in consequence to supplement its main depot at Oxton Road, Birkenhead, with temporary quarters at Hoylake and Palm Grove, Birkenhead, until more permanent arrangements could be made.

During the war years it has naturally been difficult for the Company to maintain its service to the public at the high level set by the Management. Nevertheless, a skeleton staff endeavoured to maintain the ideals of the Company under most trying and difficult conditions. Fortunately the pre-occupation of war time commitments need no longer divert the Directors from their long term objective, which is to provide a radio and electrical service, unsurpassed by any, and the public may be assured that the Management will spare no effort to achieve that goal. They are now eagerly tackling the problems of postwar retailing in order to offer the public the new products which are emerging as a direct result of the nation's war time experience.

THE MANGANESE BRONZE & BRASS CO LTD

ONE of the district's newest industries, and one of its most thriving, is the Manganese Bronze and Brass Company Limited, pioneers in the development and manufacture of high-strength brasses and bronzes, which has been established on the Wallasey side of the West Float since the winter of 1940-41.

The Company operate two works, one at Ipswich, where rolled, extruded and forged products are made, and one at Wallasey, where the main production is concerned with marine propellers. The company has specialised in this particular direction since 1870 and, indeed, claim to be the originators of the bronze propeller which is now almost universally used. They are main contractors to the Admiralty and many foreign governments, also to most of the important shipping companies at home and abroad.

Prior to 1940 the main propeller works was situated in London, but, following heavy damage in the air raids, the Company transferred the whole works to this area at the request of the Admiralty. Production was kept going right through the changeover, and by the summer of 1941 was in full swing again. The work involved in the casting, machining and finishing of marine propellers is of a heavy and specialised nature which does not lend itself to mass production methods, but rather depends on the teamwork and knowledge of men long used to such work. The majority of the workpeople came north with the Company, but their numbers were increased by the recruitment of local labour, and at the end of the war over 500 men and women were engaged.

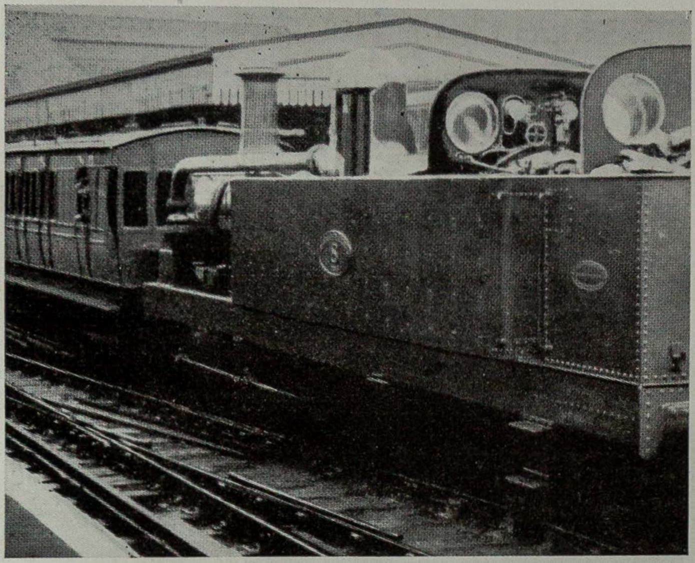
The main output of the Wallasey works comprises propellers ranging up to as much as 30 tons in weight and over 20 feet in diameter, the average weight of the bulk of the output being about 6 tons per propeller. Nearly 2,000 such propellers have been manufactured at Wallasey up to the present date, and included in this number are propellers for such well-known vessels as the aircraft carriers *Illustrious*, *Indefatigable* and *Venerable*, the battleships *Renown* and *Vanguard*, and passenger ships such as the *Britannic*, *Georgic*, and *Duchess of York*. The Company is now equipped to cast up to 50 tons in one piece, and although the possibility of being asked to cast a propeller of this weight is not great, it could be undertaken if necessary. Over 10,000 small propellers were also turned out.

Regarding the future, it is the Company's policy to implement the drive for increased production to the best of its ability. Some reduction in staff is inevitable on account of the cancellation of war contracts, but it is expected that employment will be available for at least 400 people for a good many years. It is believed that a good name has already been established for good working conditions, particularly where the foundry side is concerned, and in this connection it is claimed that this is the largest and possibly the best equipped foundry on Merseyside.

The Manganese Bronze and Brass Company has brought a new industry to Merseyside which, whilst not perhaps employing spectacularly large numbers, will nevertheless play its part in providing employment in the district and making a valuable contribution to its development and prosperity.

MERSEY RAILWAY

For Sixty Years a Vital Link in Merseyside Transport



1886

SIXTY years ago, on the 20th January, 1886, His Royal Highness the Prince of Wales arrived in Birkenhead to open the new Mersey Tunnel Railway.

The events of that day were the culmination of something of which men had dreamed for many years. The broad estuary of the Mersey separating Liverpool from Birkenhead was a barrier which the coming of the Railway Age had brought into prominence, and as far back as 1st March, 1825, the following paragraph appeared in the Press :

" It is in contemplation to form a ground tunnel under the Mersey, one end of which is to join the intended termination of the Liverpool and Birmingham Railroad Company, on the Cheshire side of the river. The subject is under consideration by the Committee of the Birmingham Railway."

This did not get beyond the contemplative stage, however, and not until 1866 was the first step taken towards establishing underground communication between Liverpool and Birkenhead. In that year Parliament granted powers for the construction of a "pneumatic tunnel railway."

The pneumatic railway never actually came into being, for steam was the power eventually adopted, but the essential part of the project—the tunnel—is the one which is in existence today.

Since that day, however, although the tunnel remains the same, the railway itself has been brought up to date. It was electrified in 1903, being the first steam railway in the country to be converted to electric traction, and progress has since then been continuous.

The smoke-laden atmosphere and steam trains of the old days have given place to bright, clean stations, with a quick service of electric trains running, not only between Liverpool and Birkenhead and Rock Ferry, but to West Kirby and New Brighton via the Wirral section of the L M S Railway.

The six million passengers per annum of the early years have become 30 millions of people carried expeditiously under the river.

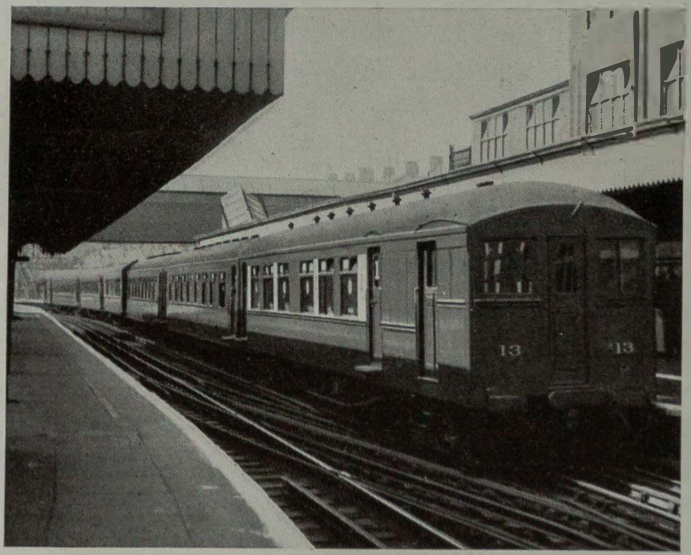
Trains and stations are well lighted, modern high-speed electric lifts are in operation, and the railway is fitted with every device that science can provide for ensuring the safety of its passengers.

During the war, owing to the increased activity in the Port, the Mersey Railway was called upon to carry fifty per cent more passengers than it had ever carried before.

Despite the " blitz," this feat was accomplished, and the men who built ships and the men who loaded them, together with many thousands of other essential war-workers, were carried to their destinations and the work of the Port went on.

The Railway was hit hard on several occasions, but although short sections of the line had to be temporarily closed to traffic, the essential cross-river service was never interrupted.

The Mersey Railway has cause to be proud of its sixty years of service to the people of Merseyside, and looks forward to continuing that service as an essential part of local transport.



1946

MOON BROTHERS LIMITED

BY tireless enterprise and wise planning the firm of Moon Brothers Limited, machine manufacturers, of Beaufort Road, Birkenhead, has developed from an inconspicuous beginning to an undertaking of considerable magnitude, well to the fore in the nation's great export drive, upon the volume of which depends the future comfort and well-being of our people.

Forty years ago, in the autumn of 1907, when the business was founded in a small way at 299 Cleveland Street, Birkenhead, there were only five employees ; today the personnel numbers 100, and as soon as further extensions can be carried out, that number will be increased to 175. In both wars the firm played its part in the production of munitions, and has supplied and is supplying undertakings all over the world with machinery and plant—in fact 65 per cent. of its present output is for direct export. Twice the works were closed down, on each occasion owing to enemy action. In 1940 part of the roof including the roof glass was shattered, and in 1941 the roof was again damaged and also parts of the wall of the building. In both instances the works were wholly repaired by the firm's own personnel, the maximum length of shut-down being ten days.

The firm was founded in 1907 by Mr. F. E. Adams under the name of The F. E. Adams Pressure Tool Co. Ltd., and for the first two years five men were employed—one fitter, one turner, one machine-man, one pattern-maker and a labourer. Mr. Adams himself and an office-boy comprised the office staff. In 1910, the late Mr. R. B. Moon, senior, joined the firm, and the concern then commenced to expand, a new factory and offices being erected in 1911 on the present site. So rapid was the increase in the demand for the company's products that the premises had to be extended in 1915. Then came World War No. 1, when the factory switched over to war work. Admirably equipped for the production of specialised machinery invaluable for munition purposes, Moon Brothers' factory was a hive of uninterrupted industry. Along with its standard product of tin box and steel drum making machinery, the firm manufactured such specialised machinery as Lewis gun belt-filling machines, field lighting sets, motor axles, etc.

The end of the war saw the firm well equipped to cope with the boom period, but the depression that succeeded was not regarded by the enterprising management as a time for resting on their oars. The Board was joined in 1921 by Mr. N. A. Bellwood, and facing the situation with grit and determination, the concern managed to tide over the years when many firms were badly hit, coming through with its business maintained in a reasonably sound condition. The firm concentrated on the production of jigs, multiple drill heads, electric iron stands, meat slicers, etc.

Another chapter in the history of the company opened in 1926 when the original partnership between Mr. Adams and Mr. Moon was dissolved, the business being purchased by Mr. Moon and the name changed to Moon Brothers. Two years later the concern was formed into a limited liability company under its present name of Moon Brothers Ltd. In 1934 Mr. J. E. Moon joined the Board, and in 1935 the factory was further extended and additional plant installed. At this period approximately seventy people were employed. In 1936 the Board was joined by Mr. R. B. Moon, junior.

With improvement in trade the firm prospered, and when war broke out in 1939 it again switched over to munitions, working day and night shifts throughout the six years of hostilities, employing 125 persons in all. The factory turned out automatic presses for bullet making, jigs, dies and fixtures for all manner of containers, including the famous ' jerrican,' along with the firm's own specialities of tin box, steel drum and screw-cap making machinery.

PORT SUNLIGHT

Greets a Neighbour

War was not all loss of blood and treasure. Some good came out of it. Ordinary men found within themselves qualities of courage and fortitude which the easier ways of peace might have left unexercised and unbreathed. And on a homelier level old virtues were reinvigorated. We got to know each other better. The community spirit was quickened, the warming fires of neighbourliness lit. That should count for something in a peace yet to be consolidated.

Port Sunlight would like to believe she has always practised the "good neighbour" policy. From the beginning she has had close ties with Birkenhead, and those ties were bound the more securely in the common ardours and endurances of war. There was much mutual helpfulness and sharing of skill and resources. With all this in mind, Port Sunlight will follow with neighbourly interest and goodwill the development of the Birkenhead Plan. She will hope for Birkenhead an enlarged and rewarding chapter in the future history of Merseyside.

The *Reilly Plan* was recently described as creating essentially "an environmental setting, which not only links the family and the individual directly with the immediate community but also constitutes a small, virtually self-contained communal unit that will fit into a larger unit somewhat as a healthy organ fits into its position in the human body ". Apply this standard to Port Sunlight as she fits into the Borough of Bebington—bearing in mind that her shape and pattern were long ago determined and have long been familiar to the world—and village and works, one and undivided, emerge satisfactorily from the test. They were built, of course, to serve a single great business, Lever Brothers' business of soapmaking, and the industries—glycerine recovery, seed crushing and the others—which go with soapmaking. Port Sunlight was, therefore, "private" in intention. But it is generally acknowledged that she helped, and helped notably, to exemplify a new conception of the industrial community. Thus, when in 1938 Port Sunlight commemorated her Golden Jubilee, *The Times* in a leading article expressed the opinion : "Port Sunlight has a place of its own in the chronicles of the housing of the working classes. It was the first example of a complete plan for an industrial garden village. For the employees of the new works that were being built beside the Mersey estuary, by the man who became Lord Leverhulme, housing of some sort was necessary. Port Sunlight was Mr. Lever's way of making the necessary provision. Imagination and practical philanthropy kept step with business enterprise. A pleasant and well-planned village of gardened houses was built near the works, and as the works developed so the village developed, radiating farther in agreeable variety of street planning. After fifty years Port Sunlight has lost its novelty, though not its interest. The number of these industrial housing estates is small, but they have served a greater purpose than the amelioration of the conditions of life for a privileged number of workpeople ; they have set a standard of housing conditions."

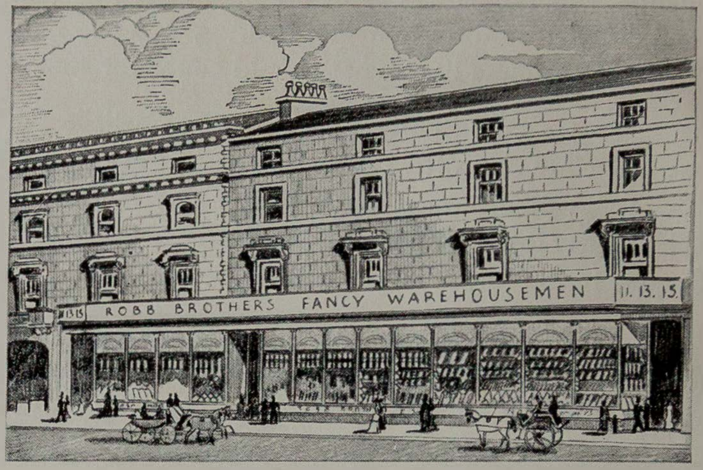
But Port Sunlight was never able to contain all her workaday population within her domestic borders. Through nearly sixty years of steady growth and expanding employment, she has drawn an important proportion of her workers from Birkenhead, and used the local railway systems and the municipal tram, omnibus and ferry services to get them to the factory gates and office entrance. That was inherent in the original intention which brought W. H. Lever to the Wirral Peninsula, and to the Bromborough Pool hinterland in search of a rural area on which to build his soapworks "adjacent to both rail and water transport, *with reasonable facilities for obtaining the necessary supply of labour* ". This logic of a strong position, and the human and industrial link with Birkenhead, have stood the test of time and endure today.

Today Port Sunlight is a manufacturing centre of marked significance to these parts, without an exact parallel anywhere in the world, and which the world continues to study. At its foundation on 3rd March, 1888, the hand of fellowship was held out to Birkenhead. Port Sunlight has her own considerable plans for the future. She goes forward to the maturing of those plans in continued and confident fellowship with her big neighbour. She goes forward sharing with Birkenhead the hope of mutual progress in prosperity towards the perfect community and the high citizenship of tomorrow.

LEVER BROTHERS, PORT SUNLIGHT, LIMITED

ROBB BROS LTD

The Birkenhead Drapers



In 1872 . . . . two brothers, George and Thomas Robb, opened their first shop at 11 Cross Street, in Birkenhead. Their ambition was to build up a business of lasting character on foundations of fair trading, hard work and service to their customers.

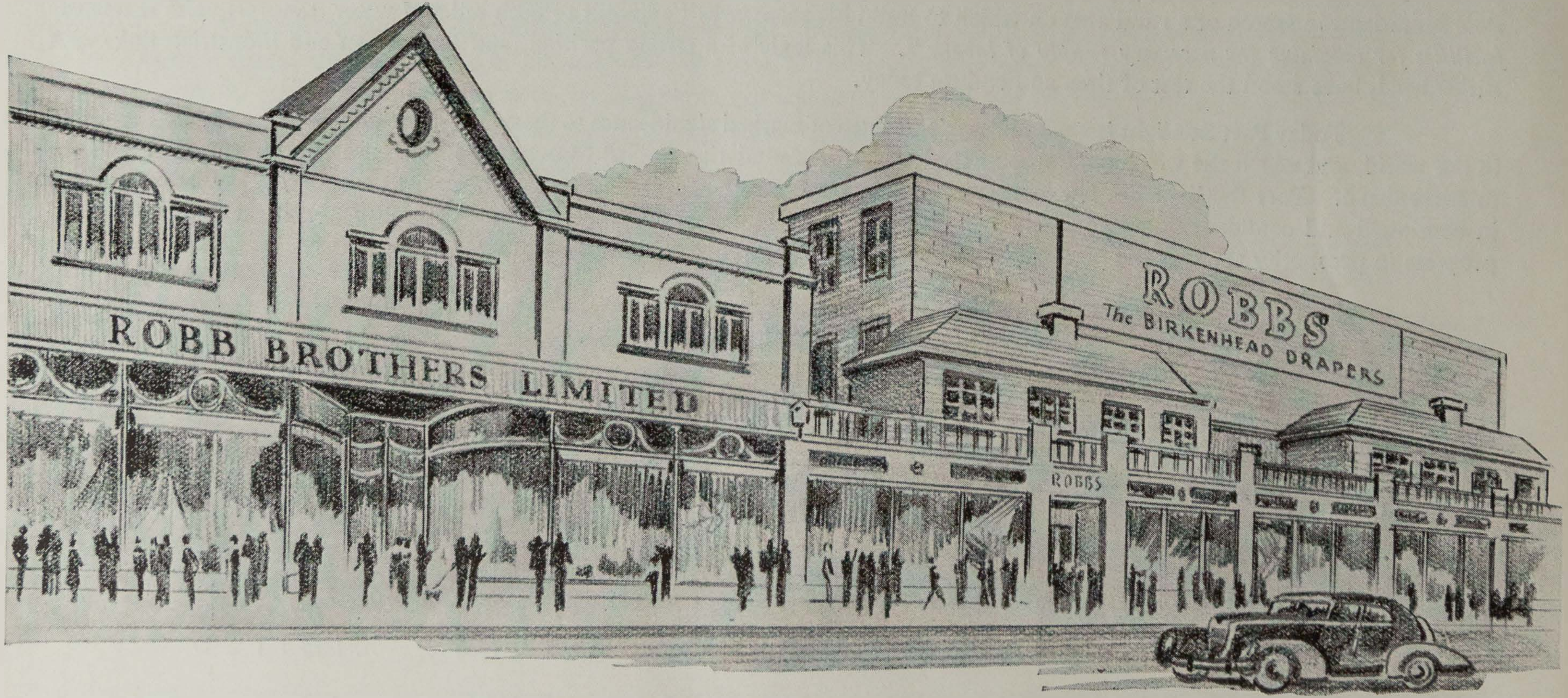
These ideals in business proved a marked success, for in 1886, the year of the opening of the Mersey Railway Tunnel, Robb Brothers moved into large new premises in Grange Road, then known as Grange Lane.

The new communication with Liverpool had a marked effect, not only on the growth of Birkenhead, but upon the migration of trade within the Borough. Charing Cross, its natural centre, was then but a district of a few struggling shops, a number of decayed private houses, and waste land. Its prospects of ever becoming a business centre were looked upon as distinctly problematical, but the foresight of the Robb Brothers was soon to be proved, for enlargement to the premises followed one another in rapid succession in an effort to provide the increasing population with first-class shopping facilities. By 1907 the original floor area had been more than trebled and the business registered as a private Limited Company.

Since then the growth of the town has continued steadily, and Robb Brothers have enlarged and extended their premises three times within the last few years. It was in 1935 that the greatest effort was made to provide better conditions for both their customers and staff. For Robb Brothers, always keen and concerned about the interests of their employees, took this opportunity of further improving their working conditions, and consideration was given to their general well-being and comfort.

At this time considerable extensions were constructed on the present site, providing many additional amenities and shopping facilities, making possible the better display of goods throughout the entire premises. Among the many new and enlarged departments was the establishment of a beautifully fitted and up-to-date ladies' and children's hairdressing department; also the delightful Oakroom Cafe Restaurant, now so extremely popular. Thus the old ideals of service to the ever-increasing number of customers has been maintained.

We are now on the threshold of new developments in the Borough of Birkenhead, and Robb Brothers have plans to provide amenities and shopping facilities in keeping with the town's progress. The policy of the original Robb Brothers remains the guiding principle of the Company which, to this day, continues to function as a private family business.



WILLMER BROS & CO LTD

Proprietors of

BIRKENHEAD NEWS
BEBINGTON NEWS

BIRKENHEAD people naturally connect the firm's newspapers primarily with its offices in Chester Street, and few realise the extent of the general printing business carried on therein. The firm are contractors on a considerable scale to H.M. Government and to Birkenhead and other local Corporations. They are also engaged in the production of books for various firms of well-known publishers and of work of all kinds for many of the country's great industrial undertakings, whilst printing for local customers always receives high priority.

The firm's newspapers continue to make progress. In 1936 the *Bebington News* was born a few weeks prior to the incorporation of that borough, and together with the mid-week and Saturday editions of the *Birkenhead News*, forms a group of newspapers which spread their lively influence into most parts of Wirral, having a weekly net sales figure of over 34,500 copies.

The history of Willmer Brothers and Company Limited is largely the story of the Willmer family from the time when the late Charles Willmer first came to Birkenhead in 1859. He settled here then at a time of crisis in his life, for it was immediately following the failure of his Liverpool newspaper, the *Northern Daily Times* — a paper which, incidentally, in itself made history by being the first daily newspaper to be published in this country outside London. At the age of forty, with six children and almost without resources, he transferred his printing business to a small house in Chester Street, Birkenhead, and in addition became for a time the editor of the *Cheshire Observer* in Chester. Later two of his sons joined him in the business, which then became Charles Willmer & Sons, and in 1879 it was incorporated as Willmer Brothers & Company Limited, Charles Willmer being Chairman of the new Company. He never personally engaged in journalism again, and it was one of his sons, Frederick Willmer, who founded the *Birkenhead News* in 1877, the year of the borough's incorporation, and who became its first editor. Charles Willmer had always interested himself in politics, and as the business prospered he took a greater part in public life. He, with five others, was largely responsible for obtaining the town's charter, gave service as a town councillor, later became an Alderman and a Justice of the Peace, and finally was elected Mayor in 1891. When he died in 1897 Alderman Charles Willmer held the respect and affection of his fellow-townsmen second to none.

His son Frederick also proved himself a first-class journalist, and under his guidance the *News* prospered. It was a great misfortune when he died, a comparatively young man, in 1891. He was succeeded in the editorial chair by his brother, Charles Watkin Willmer, who also died in early middle age in 1903.

There followed one of the most remarkable periods in the history of the firm, for it was decided by the family that the vacancies created by the death should be filled by the two Willmer sisters, Miss Laura and Miss Jeannie. The former founded the *Wallasey News* and edited it for the first eighteen years of its life till it was sold to its new proprietors in 1918; whilst the latter became editor of the *Birkenhead News* in 1903, a position which she filled with distinction until her death thirty years later. The Board of Directors was at this period presided over by George Harvey Willmer, who was well-known in yachting circles. On his death, however, the position of Chairman passed to the sole surviving brother, Arthur Washington Willmer, the Liverpool cotton broker, who had also been prominent in the public life of Birkenhead, being Mayor in 1910-11. Under his chairmanship the machinery was modernised and the buildings greatly enlarged and brought up-to-date. Whilst hitherto the firm had been capable of ordinary commercial work as well as newspaper printing, it now became competent to produce in addition the finest quality colour printing, book printing, and catalogue and publicity printing. Furnished with modern type-setting machinery, both monotype and linotype, a foundry, fast-running automatic printing machines, and a complete bindery, it is today one of the best equipped works of its size anywhere in England.

The control has now passed to the third generation. E. Wrayford Willmer, Chairman and Managing Director, is a son of the late A. W. Willmer. Other members of the Board of Directors are as follow: Fred Willmer (son of the late C. W. Willmer), Colonel H. T. Willmer, O.B.E., M.C., T.D. (son of the late A. W. Willmer), Mrs. Elizabeth G. Willmer (wife of the Chairman), G. L. Finigan (Editor of *Shipping*), W. A. Corlett (General Manager) and Mrs. C. M. Davis.

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BIRKENHEAD PLAN

BIRKENHEAD PLANNING SCHEME

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